

Startling Savings on Labor Costs Described in this Issue

Vol. 68

No. 14

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NATIONAL PROVISIONER

CHICAGO AND NEW YORK

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APRIL 7, 1923

Published every Saturday by The Food Trade Publishing Co., Old Colony Bldg., Chicago, Ill.
Entered as second-class matter, Oct. 8, 1919, at the postoffice at Chicago, Ill., under the act of March 3, 1879.
Subscription Price: United States, \$3.00; Canada, \$4.00; All Foreign Countries in Postal Union, \$5.00.



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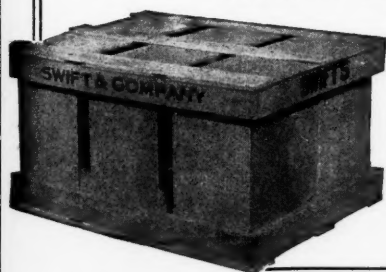
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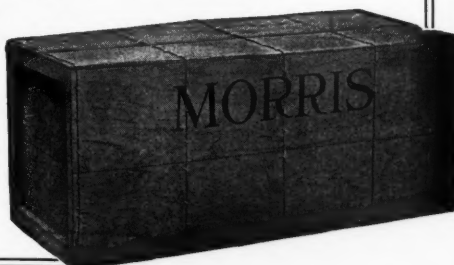
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THE NATIONAL PROVISIONER

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OFFICIAL ORGAN OF THE INSTITUTE OF AMERICAN MEAT PACKERS AND THE AMERICAN MEAT PACKERS' TRADE AND SUPPLY ASSOCIATION
PUBLISHED EVERY SATURDAY

Entered as second-class matter at the postoffice at Chicago, Ill., under the act of March 3, 1879.

Vol. 68.

Chicago and New York, April 7, 1923.

No. 14.

Labor Costs in the Packing Plant

How They May Be Reduced by Time Study and the Application of a Production Bonus Plan—Method Has Been a Success in Other Industries—Results of Application to a Meat Plant

Labor cost has been one of the bugbears of the meat packing industry, especially in recent years. In the old days of big margins and careless methods it was not so much thought about. But as wages went up and margins went down it became a troublesome question.

The larger the packer's operations, the greater his labor difficulties, especially where the labor union element figured in the situation. Even so-called small packers had trouble with the labor question.

About a year ago this labor union difficulty came to a head in a strike which resulted in the apparent defeat and wiping out of the packing house labor unions. But wise packers, large or small, whether they were involved in this union controversy or not, have recognized that such an outcome by no means settled the labor problem. So long as discontent is present, such troubles are always likely to recur.

Need More Than Good Feeling.

Packers have gone a long way toward solving the problem of industrial relations by the adoption of various employees' representation plans, which have been fully described in the pages of THE NATIONAL PROVISIONER. But even the success of these plans does not put beyond question the recurrence of labor difficulties.

And certainly it does not get to the root of the matter of labor costs. Something more must be done than to devise and carry out employees' representation plans. And everybody agrees that "cutting wages" or "trimming the force" is not wise or lasting economy.

When THE NATIONAL PROVISIONER recently opened the discussion of a "time study" to reduce labor costs in the pack-

ing industry, some people may have considered it either too "highbrow" or an impractical method as applied to our industry. Possibly a good many who noticed the opening article by Mr. Leonard E. Rollins, a packinghouse consulting engineer, either did not take the trouble to read it, or dismissed it as being something over the heads of most people.

Some Startling Results.

Nevertheless such a study is being carried on in the packing industry at this time, and plans based on it already are being tried out in one or more plants.

The results are almost too startling to be believed. While it is not possible to give them in detail at this time, yet it can be stated that in one plant in the Middle West a method of wage payment has been put in force which has effected remarkable savings in labor cost, and at the same time has enabled the workers to increase their earnings.

Eight Cents a Hog!

If a packer told you he put a new plan into effect by which he **saved 8 cents per hog on the labor cost in his killing and cutting departments**—would you believe him?

It has been done, not a thousand miles from Chicago, through the adoption of a "production bonus plan." And the men earned from 10 to 15 per cent more pay while doing it, too!

Are you keeping up with this discussion on the "Time Study of Labor Costs?"

To reduce wage costs while increasing wages may seem impossible, but it has been done. By paying his men according to the amount of work they do, and their efficiency in doing it—instead of paying them merely for the time they put in—this packer has already shown a saving on his labor cost of 8 cents per hog in his killing and cutting departments. And his men are earning from 10 to 15 per cent more in wages!

Made Money for Both.

This is the result of a time study of labor costs in one plant, and the showing was made after the bonus system had been in effect only two weeks. This is remarkable, and should not be taken as a standard, since in other industries where the production bonus plan has been tried it usually has been four months before such results were obtained.

Another feature reported by this plant executive was this: Before the plan was tried the labor "turnover" averaged 15 per cent per week. After it had been in effect two weeks the attendance in the killing and cutting departments, where it was tried, was practically 100 per cent.

Superintendents will appreciate what this means in these days of uncertain and unreliable labor conditions.

It is apparent that there is something worth while in this time study of labor costs in the packing house. An industrial engineer who has made a success of this work in other industries, and whose study in the meat packing field brought the results here referred to, writes to THE NATIONAL PROVISIONER at its request concerning its discussion of this subject, and touches upon the peculiar conditions

as he found them in this industry. His communication is printed here. It will be followed by further discussion of the subject, in which every packer who figures his labor costs should be interested.

A Study of Labor Costs

By Hasbrouck Haynes.

By its course in taking up editorially and through the publication of such articles as that in a recent issue by Leonard E. Rollins on "Time Study to Reduce Labor Costs in the Packing Industry," THE NATIONAL PROVISIONER is doing the industry at large a very valuable service.

In speaking of the efficiency of private over government ownership of railroads, Dr. Julius Parmelee, Director of the Bureau of Railway Economics, said:

"History teaches that the removal of the economic incentive leads to inefficiency and decay. Whether we like it or not, the only great motive underlying our great industries and economic progress has been the operation of the factor of individual self-interest."

The same principle applies to labor—it is based on the first law of nature, self-preservation.

Experience has shown that if a workman is given the opportunity to share financially in the savings resulting from doing his work more efficiently, he will do not only quicker but also better work, and his interest will be greatly stimulated. He then goes into "business for himself."

More Efficiency, Less Labor Cost.

Mr. Rollins is correct in stating that labor incentives based on time study analyses have increased individual workers' output from two to four times in other industries. But I am sure Mr. Rollins did not intend to infer that one could expect such remarkable results throughout an entire organization. While such extraordinary increases in output occur not infrequently at certain points throughout any concern first employing incentives, it has nevertheless been my experience that if the average productivity of a department or the plant as a whole is increased from 30 to 50 per cent it is doing exceptionally well. And unless there is some radical change in the method of doing the work this is about as much as can be expected.

However, increases in efficiency such as from 30 to 50 per cent will have a very marked effect on the reduction of labor cost, which, under these circumstances, should decrease after paying all bonuses at least from 15 to 25 per cent. Such payroll savings I have witnessed in many industries, and I have also equaled them in all departments of the meat packing industry which I have studied to date.

Packer's Situation is Peculiar.

It is indeed fitting and proper that the one industry which stands out prominently above all others for economy and efficiency in many ways, and especially in the utilization of its by-products, should now strive for a similar position among the great industries of the country in its labor efficiency. But there are many variables in the meat packing industry that must be carefully considered and provided for in order to arrive at a plan for labor compensation equally satisfactory and fair to both employer and employee.

As a comparative newcomer in this industry, I can see many reasons why labor incentives and other so-called scientific production methods have not until recently been applied to any great extent to the production of meat and its by-products. As you well know, there is a great difference between the production conditions in this industry and those of other industries. Possibly no one condition in itself is so important, but the fact that there are so many peculiar conditions is what I believe has baffled engineers and others who, in the past, may have attempted such installations.

When I first investigated the meat packing business from the standpoint of labor incentives I was completely bewildered.

For example, it was the first experience I had ever had in connection with my engineering work where my raw material could not be stored for any length of time without "eating its head off," and which came into the plant by its own motive power. Then I was greatly perplexed to find that there was no such thing as a production schedule, as the receipts and purchases of livestock are undeterminable in advance, and a perishable raw material and its product have to be kept moving.

It took me some little time to fully grasp the significance of "disassembling" my raw material to make my major finished products, which, of course, is the reversal of the usual manufacturing or fabricating process.

Then, to add to the complexity of my raw material situation, I found that, like thumb prints, no two of my raw material units were necessarily alike, and the variation in weight alone might be upwards of a 100 or even 200 per cent.

To further disconcert me I was very much surprised to find that any impairment of product due to increasing the speed would cost many times the possible saving in labor.

A Hard Problem to Solve.

On top of all these variable conditions, and many others not mentioned, I found that the nature of the work from department to department also varied completely, and the changes were just about as abrupt as going from a Turkish bath into a cold plunge. For example, from a production standpoint, there is little, if any, relation between slaughtering cattle and refining lard, although both may be done under the same roof.

However, I am happy to be able to say that these conditions are by no means insurmountable in the application of labor incentives. But from difficulties already experienced and problems solved in this in-

dustry, I am convinced that any method, to be successful, must be designed only after making a very thorough and careful analysis of all of the many factors bearing on production.

The compensation behind all this work is well worth the trouble, because the more unstandard the conditions the greater becomes the opportunity for savings through labor incentives and for paying liberal bonuses to employees.

Method of Paying Wages.

The establishing of time standards is only half of the problem, as the selection of the method of wage payment is equally as important a factor. The ordinary piece work system for paying labor is not sufficiently flexible to adjust itself to the many variable conditions of the meat packing business.

The standard time and bonus system in my judgment is the most desirable wage payment method from the standpoint of the management, as well as that of the men. The following statement from Babson's Reports further indicates the desirability of the production bonus as a wage payment method:

"When we say 'bonus' we do not mean mere gift bonuses. There is an infinity of such plans. Boiled down, they simply mean that the employer makes up his mind to stage a 'hand-out' to his employees. Such gifts are usually of questionable service. They raise expectations and when they are afterwards omitted they cause regret."

"An employer should be able to find something better to do with his surplus cash than to give it away for nothing. If there is some good reason for his giving it away, the gift and the reason should be closely correlated and plainly set forth. This the production bonus plan sets out to do."

The Right Kind of Bonus Plan.

"Of course this idea is in no way new. Its oldest and commonest form is the salesman working on salary and commission. He has a guarantee that amounts to a meal ticket and what the firm pays him in addition depends on the amount of business he does. There is usually no limit except the sky. * * * What we are talking about here is the extension of this idea down into the works, whereby the worker is made to depend for his wages upon the amount of work he turns out, or upon other items desirable in an efficient plant."

An Effort Worth While.

The progressive program of the Institute of American Meat Packers indicates the alertness on the part of packers to take advantage of every means for bettering their conditions. If bringing sustenance, happiness and comfort to one's fellow beings is a true measure of usefulness in this world, the meat packing industry may well be said to be the most useful of all industries, and is one in which every economy and efficiency is well worth while. To me the variety of conditions encountered and problems to be solved are most fascinating.

Permit me to again express my hearty approval of THE NATIONAL PROVISIONER'S campaign for lower labor costs through the application of a scientific analysis and, if I may add, the adoption of a more flexible method of wage payment for incentives than piece work, which has been employed in the past.

Yours very truly,

HASBROUCK HAYNES.

[EDITOR'S NOTE.—Further discussion of this subject will appear in an early issue of THE NATIONAL PROVISIONER.]

Your Fuel Losses?

How much money is going up your packinghouse chimney in smoke?

How much is leaking away through faulty pipe coverings and faulty insulation?

Are you reading the articles written for THE NATIONAL PROVISIONER by experts on these subjects?

Packers to Promote Trade Extension

Special Committee Appointed by President of the Institute to Take Up Many Matters Affecting the Welfare of the Industry

Charles E. Herrick, president of the Institute of American Meat Packers, this week announced the creation and appointment of a Committee on Trade Extension, for the express purpose of promoting increased meat consumption and of co-operating with the National Livestock and Meat Board to this end. All sections of the United States are represented in the membership of this committee. A full list of the appointees is given below.

Mr. Herrick states that a meeting of the committee will be held in Chicago at an early date.

In advising members of the committee of their appointment, Mr. Herrick said:

Purpose of the Special Committee.

"The Institute's Central Administrative Committee at its recent meeting approved the suggestion submitted by a number of its members to the effect that there should be a general committee appointed for the purpose of carrying out the work outlined by the National Live Stock and Meat Board, and the various standing committees of the Institute. In view of the fact that the campaign to promote meat consumption is now organized on a permanent basis and the organization has employed a managing director, it is essential that our members be prepared to co-operate in the movement in every possible way.

"I am, therefore, appointing a committee of representative members fairly distributed throughout the country. This will be known as the Special Committee on Trade Extension. In selecting these men I have been guided by a desire to designate those who are interested in work of this character, and who are conveniently located with reference to their associates in the same territory.

"It is desirable that we have a good attendance at the first meeting of the Committee, and this will be held in Chicago at an early date. Notice will be sent out sufficiently in advance so that every member may be present. Later meetings may be called from time to time.

"The standing committees of the Institute have been and are considering many important subjects. Prior to the meeting of the Special Committee, recommendations on certain important subjects will be made by the standing committees, and, after approval by the Central Administrative Committee, will be outlined in detail to this meeting of the Special Committees.

Plans to Be Considered.

This committee will then be asked to make those approved plans and policies effective throughout the industry. The following subjects are among the important matters which the standing committees of the Institute have under consideration:

1. Co-operate in carrying out the purposes and plans of the National Live Stock and Meat Board, with possible consideration of promoting a National Meat Food Week.

2. Economical and efficient methods of packing and preparing products for the trade, and a further standardization of containers. This will contemplate the preparation of an exhibit that will vividly portray the need for prompt adoption of

recommendations designed to lessen the number of types of containers in use.

3. Suggestions pertaining to methods of the Bureau of Animal Industry inspectors, and possible recommendations to the Bureau as to changes necessary to make their regulations more practicable without impairment of the service.

4. More efficient delivery methods, and a discussion of the best methods employed in different localities and territories.

5. Improved methods of handling livestock.

Your prompt acknowledgment and acceptance of this appointment will be appreciated, and notice of the first meeting will be sent out just as soon as all acceptances are in.

Yours very truly,

CHARLES E. HERRICK,

President.

Committee on Trade Extension.

The packers selected for this committee are as follows:

James S. Agar, President, Agar Packing & Provision Company, Inc., Chicago, Illinois.

J. A. Hawkinson, President, Allied Packers, Inc., Chicago, Illinois.

Wilson Arbogast, President, Arbogast & Bastian Company, Inc., Allentown, Pennsylvania.

F. Edson White, President, Armour and Company, Chicago, Illinois.

E. L. Flippen, President, Armstrong Packing Company, Dallas, Texas.

Frederic S. Snyder, President, Batchelder & Snyder Company, Boston, Massachusetts.

C. H. Ungerman, President, Birmingham Packing Company, Birmingham, Alabama.

Joseph P. Murphy, Vice President, The Blayney-Murphy Company, Denver, Colorado.

T. Kenneth Boyd, President, Boyd, Lunham & Company, Chicago, Illinois.

B. G. Brennan, President, Brennan Packing Company, Chicago, Illinois.

Bayard C. Dickinson, General Manager, Louis Burk, Inc., Philadelphia, Pennsylvania.

Louis J. Burkhardt, President, Henry Burkhardt Packing Co., Dayton, Ohio.

S. T. Nash, President, The Cleveland Provision Company, Cleveland, Ohio.

T. Davis Hill, President, Corkran, Hill & Company, Inc., Baltimore, Maryland.

Michael F. Cudahy, President, Cudahy Bros. Co., Cudahy, Wisconsin.

E. A. Cudahy, Jr., Vice President, The Cudahy Packing Company, Chicago, Illinois.

Jay E. Decker, President, Jacob E. Decker & Sons, Mason City, Iowa.

J. C. Dold, President, Jacob Dold Packing Company, Buffalo, New York.

Ernest S. Urwitz, General Manager, Dryfus Packing & Provision Company, Lafayette, Indiana.

Geo. L. Franklin, President, Dunlevy-Franklin Company, Pittsburgh, Pennsylvania.

Frank A. Hunter, President, East Side Packing Company, East St. Louis, Illinois.

David G. Madden, Vice President, East Tennessee Packing Company, Knoxville, Tennessee.

Morton Mannheimer, President, Evansville Packing Company, Evansville, Indiana.

John J. Felin, President, John J. Felin & Company, Inc., Philadelphia, Pennsylvania.

Fred Figge, President, Figge & Huter Company, New York, New York.

E. A. Reinemann, President, Fried & Reinemann Packing Company, Pittsburgh, Pennsylvania.

Wm. O. Haas, President, Haas-Davis Packing Company, Mobile, Alabama.

T. W. Tallafiero, President, Hammond, Standish & Company, Detroit, Michigan.

George L. Heil, President, Heil Packing Company, St. Louis, Missouri.

R. T. Keefe, President, Henneberry & Company, Arkansas City, Kansas.

Julius Wiederstein, President, John Hoffman's Sons Company, Cincinnati, Ohio.

A. C. Hoffman, President, A. C. Hoffman & Sons, Syracuse, New York.

Isaac Powers, Manager, Home Packing & Ice Company, Terre Haute, Indiana.

Geo. A. Hormel, President, Geo. A. Hormel & Company, Austin, Minnesota.

R. E. Paine, President, Houston Packing Company, Houston, Texas.

Patrick Brennan, President, Independent Packing Company, Chicago, Illinois.

E. C. Merritt, Vice President, Indianapolis Abattoir Company, Indianapolis, Indiana.

Fred T. Fuller, President, Iowa Packing Company, Des Moines, Iowa.

Louis W. Kahn, President, E. Kahn's Sons Company, Cincinnati, Ohio.

Michael A. Keane, President, T. T. Keane Company, Inc., Washington, D. C.

W. R. Sinclair, Vice President, Kingan & Company, Indianapolis, Indiana.

W. H. Gehrmann, President, Kohrs Packing Company, Davenport, Iowa.

Otto Finkbeiner, President, Little Rock Packing Company, Little Rock, Arkansas.

Karl M. Zaeh, Manager, Louisville Provision Company, Inc., Louisville, Kentucky.

Myron McMillan, Secretary, J. T. McMillan Company, Inc., St. Paul, Minnesota.

Oscar G. Mayer, Vice President, Oscar Mayer & Company, Inc., Chicago, Illinois.

John Roberts, President, Miller & Hart, Chicago, Illinois.

T. Henry Foster, President, John Morrell & Company, Ottumwa, Iowa.

Henry C. Muhs, President, Henry Muhs Company, Passaic, New Jersey.

Henry Neuhoft, President, Neuhoft Packing Company, Nashville, Tennessee.

G. Harvey Nuckolls, President, Nuckolls Packing Company, Pueblo, Colorado.

Jas. B. McCrea, President, Ohio Provision Company, Cleveland, Ohio.

C. H. Ogden, General Manager, Pittsburgh Provision and Packing Company, Pittsburgh, Pennsylvania.

John W. Rath, President, Rath Packing Company, Waterloo, Iowa.

Albert T. Rohe, Vice President, Rohe & Brother, New York, N. Y.

Gustav Bischoff, Jr., Vice President, St. Louis Independent Packing Company, St. Louis, Missouri.

Joseph Kurlde, Vice President, Wm. Schludenberg-T. J. Kurlde Co., Baltimore, Maryland.

Howard R. Smith, President, Shafer & Company, Baltimore, Maryland.

R. S. Sinclair, President, T. M. Sinclair & Company, Ltd., Cedar Rapids, Iowa.

T. P. Breslin, President, Standard Packing Company, Inc., Los Angeles, California.

Frank J. Sullivan, President, Sullivan Packing Company, Detroit, Michigan.

G. F. Swift, Jr., Vice President, Swift & Company, Chicago, Illinois.

M. C. Teufel, President, Theurer-Norton Provision Co., Cleveland, Ohio.

Frederick A. Vogt, President, F. G. Vogt & Son, Inc., Philadelphia, Pennsylvania.

John S. Weaver, Lebanon, Pennsylvania.

C. J. Hooper, President, Western Meat Company, South San Francisco, California.

W. H. White, Jr., President, White Provision Company, Atlanta, Georgia.

Fred L. Wilson, Manager, Wilson Provision Company, Peoria, Illinois.

Thomas E. Wilson, President, Wilson & Company, Chicago, Illinois.

"Long and Short" in Marketing Hogs and Bacon

Story That Hog Grading Has Recently Revealed in Canada—How Canadian Bacon Is Being Marketed at Present in Great Britain

Why is the bacon-type hog preferred by meat manufacturers to the plump, full-bodied hog of the same weight? The reasons for this preference do not yet seem to have been clearly grasped by the majority of producers. This delay in understanding that there are good reasons, not of theorists, but of hard-headed business men who measure results by dollars and cents, is also delaying the proper expansion of the Canadian hog industry, according to the Industrial and Development

and the back fat, about one and a quarter inches wide, is even from end to end. This side was from a "select" hog—properly so called.

Contrast this with the side on the right. The hog here was not a "select" in grade but it was chosen to illustrate the points of difference. Note the extreme shortness, the heavy back fat, and the gross form of ham and shoulder. Each of these faults singly would put the product off the English market for "Wiltshire" bacon.

Bacon Hog Yields More Meat.

How much superior the bacon-type hog is in yield of meat to the thick fat hog, was graphically shown during a recent course of instruction in marketing to young farmers at an Ontario packing plant. Two carcasses of hogs of different grades were taken and prepared for the market, each step being seen by and fully explained to the keenly interested young men. The yield or result in meat and waste was afterwards put into table form for their information. The table was as follows:

Live Weight:	
Bacon type	186 lbs.
Fat type	163 lbs.
Dressed Weight:	
Bacon type	140 lbs.
Fat type	125 lbs.
Trimming (excluding head and feet):	
Bacon type	12 lbs.
Fat type	22½ lbs.

"Trimming" are the odds and ends which must be cut off hams, shoulders and "middles" to round them off and generally to shape the meat cuts for the retail trade; they are of very small value when taken off.

The percentage of returns are instructive. The dressed carcass of the fat hog showed a little higher rate than the bacon type, 76½ per cent to 75 per cent, but in every step afterwards the bacon type was superior. For instance, though a bigger hog, the bacon type showed a 12-lb. loss or 8.5 per cent, as against almost twice as much, 22½ lbs., or 18 per cent in the fat hog. In untrimmed loins the percentages were 13.5 for the bacon hog and 12.8 for the fat type; trimmed loins 10.7 per cent for the bacon to only 7.2 per cent for the fat hog.

All through the bacon type was better in its meat yield.

If the first producer does not supply what the ultimate consumer demands, it is illogical to expect the intermediate packer to pay a first-grade price for it.

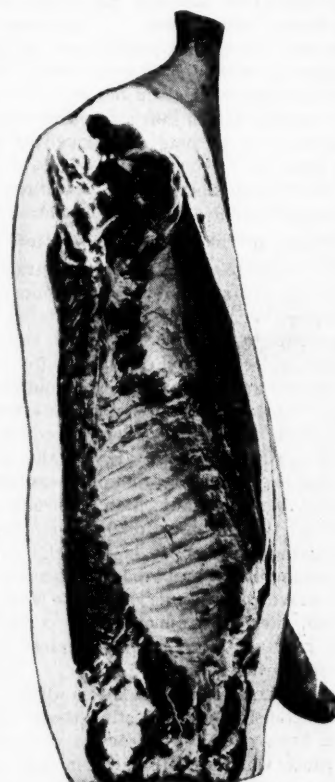
More Select Danish Hogs.

Compare the Canadian official record to date of 11.1 per cent of "selects" among the hogs marketed with the fact that fully 85 per cent of the Danish hogs grade "select," i.e., suitable for export to Great Britain. One then begins to touch the fringe of our problem.



THE ARISTOCRAT OF HOGS.
The type that yields high-class export bacon.

It is becoming fairly well known in Canada that it exports bacon to England in the form of "Wiltshire sides." Unlike the names of "Yorkshire" and "Berkshire," the term "Wiltshire" applies not to the breed of live animal, but to the slaugh-



Weight of side 60 lbs.; length from aitch bone knob to neck 32 inches, showing short "middle cut" not accepted by British buyers.

tered and dressed product. In fact, it is only a technical term for the style of dressing the meat. It is one-half of the dressed carcass without the head and feet. From a butcher's standpoint there are other details, but that is the broadest definition.

Almost any hog could, of course, be cut "Wiltshire" style, but in practice in Canada only those hogs suitable for export to Great Britain are so treated. Our domestic trade calls for quite different dressings.

In the export trade there are two main classes of "Wiltshire sides," of which one has two subdivisions:

- (a) leanest
- lean
- (b) prime.

At first sight these terms offer a little difficulty because they do not quite accord with our common ideas of what is best in meat animals. Prime, for instance, in a bullock would be first-class, while in a "Wiltshire side" it has come to mean stout or fat and therefore not desirable, and "leanest" for cattle would be at the foot of the scale. These terms have grown out of trade custom in England and we must accept them as they are.

Sections of Bacon Classes.

But within the two main classes there



Weight of side 64 lbs.; length from aitch bone knob to neck 37½ inches, showing the long "middle cut" desired in the British trade.

Council of Canadian Meat Packers. Some vitally important conclusions on hog and bacon grading have been developed by this enterprising organization and have been summarized in the following article which will be of interest to all packers:

The illustrations accompanying this article make it clear how hogs, weighing alive about 200 lbs. may yield a product utterly different. One of the "Wiltshire sides" (on the left) is almost perfect. It has the right length so that when the ham and shoulder are off the "middle cut" contains the proper length and the side has throughout the nice balance that will make up attractively for retailers. It also has the desired layering of lean-and-fat

are several sections. These are based upon the weights of the sides. Each section has a five-pound range. Acceptable market weight is a most important point in the system of selling export bacon. The most desirable weights run from 50 to 55 lbs., 55 to 60 lbs., and 60 to 65 lbs. "Wiltshire sides" 40 to 50 lbs., 65 within the double class of leanest-lean. Yet this is not invariably so. A marked scarcity in one section of weights or one class of bacon occasionally sends the price up just as an occasional surplus sweeps the price down. Leanest-lean under 50 lbs. and over 65 lbs. is discriminated against in price and, if under 45 lbs., or over 75 lbs., suffers a sharp cut. Prime, excepting in periods of exceptional scarcity, takes second price but when over 75 lbs. always suffers severely in price.

Trade Names Not Rigid Grades.

Thus it will be seen that the trade names, leanest, lean and prime, are really

or seven months the more likely is it to furnish what the packer in turn must supply to the English bacon curer. Properly grown a hog then will have attained the needed 200 lbs. to yield the best grade, range and quality "Wiltshire."

Preparing Bacon for Export.

How are "Wiltshire sides" prepared? When a hog reaches the packing plant it is at once sorted into either the scalding class, i. e., for the domestic trade, or into the singeing class, i. e., for the export trade. The latter name is used because after the hog has been scalded and de-haired by machine in the usual way, it is drawn up through a large singeing cylinder, within which are numerous high power flame jets.

The process not only singes off any remaining hairs, but it materially affects the quality of the rind. This is necessary for our export trade because in England it is a widespread custom to leave the rind on bacon until it is actually served on the plate, partly because there is less waste and partly because the practice is thought to preserve the juices and flavor of the bacon better.

After the hogs are singed they are thoroughly cleaned before being examined minutely by Dominion Government inspectors, skilled men who are in every sense independent of the packing company in whose premises they work. They see to it that the product passed is perfectly free of disease and is quite fit for human food. Only such product may bear the stamp, "Canada Approved."

Any carcass or part of a carcass showing signs of being unfit is at once taken away and destroyed so that it cannot be consumed. The approved carcasses are split down the back into halves. Then they are sent to the cooling room to be chilled, a process that takes from 48 to 72 hours. The half-carcasses are then passed over the cutting tables, the head and feet and a few bones and other parts removed and then only does the product technically take the form of "Wiltshire sides."

Sorting of Wiltshires.

The sides thus trimmed go to the pickling cellars, to remain there until cured. On being taken out the "Wiltshire" sides are sorted—of course irrespective of any particular breed of hog from which they may have been cut—into the three main classes of leanest, lean and prime; and each of these classes is again sub-sorted according to weight range. They are then drained for about 36 hours and after a further inspection are packed for overseas shipment.

The standard packing is 12 to a box, each box having only the same class, whether leanest, lean or prime, and being limited to the same weight range. Grade and weight are marked on the outside of the box so that when received in England by the packer's agent he knows precisely what it contains. Once in England the "Wiltshire sides" are sold to jobbers and bacon curers who pickle, smoke and otherwise prepare them for the retail trade.

That is practically the whole story of the processing of Canadian export bacon.

Waste in a Hog.

Twenty-two per cent by weight of every live hog goes as waste when it is slaughtered. In other words, 22 cents out of every dollar paid for a living hog are for something which cannot be used.



"Wiltshire side" of a good type bacon hog spoiled by over-fattening. Notice the thick layers of fat on back and belly and within the carcass. An "out-weight."

convenient technical terms rather than rigid grades of bacon. A bacon-type hog, properly fed and finished to 210 lbs., will get into leanest or lean and command the highest price, while a hog of fat type, no matter how carefully fed, will generally grade into prime, even though weighing only 180 lbs.

Besides the specific points there is a certain interlayering of lean and fat that is essential and, quite as important as anything, there must be, in both lean and fat, that hard thing to define that is known as "quality." The fat, for instance, must be of a nice, delicate, white color and be firm in texture. In the lean the fiber must be fine and tender.

As a hog grows older the delicacy and fineness of texture are lost. For that reason if a hog can be marketed at six



"Wiltshire side" of a good type hog under-finished. Note the thin strips of fat. The side was flabby through lack of finish. Impossible to export.

Nor is this the whole story. Much of the remainder is inedible. The saleable portions of a hog give the following average yield:

	Per cent.
Back bacon	12
Breakfast bacon	14
Hams	19
Boneless rolled shoulders.....	18
Lard	12
Trimnings and inedible parts.....	25

100



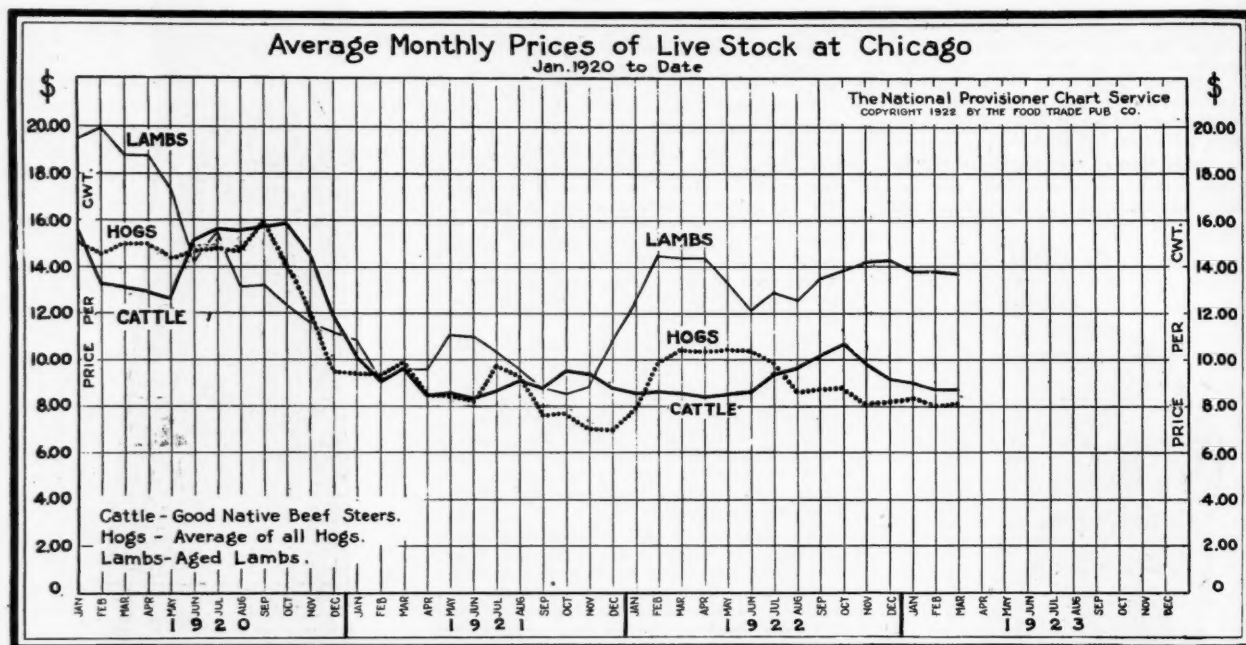
EXPORT BACON STANDARDS—TYPE OF HOG DESIRED.

To yield the best "Wiltshire side" a hog should be of the type shown. Jowl and shoulder light and smooth; back from neck to tail evenly fleshed; side long, medium depth, dropping straight from back; ham full; good general finish, no excess fat; weight 160 lbs. to 210 lbs. (170 lbs. to 220 lbs. at the farm.)

Hog Prices Went Up During March While Lamb Declined

During the month of March, 1923, the prices of hogs increased somewhat. On the other hand cattle prices held steady at the same figure. Lambs dropped a little in price for the same period.

Of the individual prices, hogs averaged \$8.20 compared with \$8.05 for February, and \$8.35 for January. Good native steers averaged \$8.85 for March, 1923, compared with \$8.85 for February and \$9.15 for January. Aged lambs averaged \$13.85 for March, 1923, \$13.90 for February and \$13.90 for January.



Livestock Prices at Chicago for March Compared to Six-Year Pre-War Average

Showing percentage of prices for March, 1923, 1922, 1921, and 1920, to the average of March during the six years, 1909 to 1914:

GOOD NATIVE BEEF STEERS.	
Mar. 1923.....	114.48
Mar. 1922.....	110.9
Mar. 1921.....	125.2
Mar. 1920.....	168.9
Mar. av. 1909-14.....	100
HOGS—ALL GRADES.	
Mar. 1923.....	103
Mar. 1922.....	131.3
Mar. 1921.....	124.5
Mar. 1920.....	187.8
Mar. av. 1909-14.....	100
LAMBS—AGED.	
Mar. 1923.....	178
Mar. 1922.....	185.1
Mar. 1921.....	124
Mar. 1920.....	241.6
Mar. av. 1909-14.....	100

MARCH MEAT AT LOW PRICE LEVEL.

The wholesale prices of practically all kinds of meat have continued at relatively low levels during the month just closed, and the volume of consumption has been again large, according to a review for March by the Institute of American Meat Packers.

The Easter demand for hams was considerably in excess of that of a year ago, and wholesale prices improved somewhat, but still remain about a third lower than at this time last year. Bacon and picnics likewise have been in good demand. The wholesale prices of these products also merit the attention of consumers. Picnics, for example, are selling in the wholesale

markets about 40 per cent below the price of hams, which themselves are wholesaling cheaply.

A probable reason for the large volume of meat consumption is indicated by recent figures on retail prices from the U. S. Bureau of Labor Statistics which show that, as compared with 1913, meats continue to sell several points below the average of all articles of food combined as listed by the Bureau.

There was a good trade in lard and fat backs during March with Germany and other Continental countries, especially during the first part of the month. During the latter part of the month, however, the demand from abroad for lard slackened somewhat. It is reported that stocks of

lard on the Continent are rather heavy.

Prices of meats in England have not been satisfactory, and, although they have shown some improvement, are still below parity with values here. Lard prices also have continued below American values. As a consequence, trade with England has been of small proportions. There was a slight renewal of the demand for hams, bellies and lard, but the trade seems to feel that this renewal may be only temporary. The general opinion is that Danish killing will continue heavy.

Fresh Pork Good But Low Prices.

The trade in fresh pork was very good, but there was so much product on the market that price levels remained unsatisfactory. Pork loins and some other fresh cuts recovered slightly, but the prices of butts declined.

As has been mentioned, the trade in smoked meats, particularly regular hams, was good. Some packers report that an excellent trade for skinned hams has tended to keep the stocks of the heavier grades of hams from increasing, although other packers state that the heavier hams have been dragging somewhat. At present, from the viewpoint of the consumer, the wholesale prices of practically all grades of hams are very attractive.

Dry salt meats have been in good demand, the trade exceeding that of a year ago.

Lard prices rallied somewhat during the middle of the month, but then declined, and at the end of the month were lower than at the beginning. With the slackening of lard exports toward the end of the month, stocks increased somewhat.

Hog prices remained well above \$8 per 100 pounds during the month, regardless of the fact that receipts continued heavy. Receipts at twenty leading markets for the three months ending with March were approximately 30 per cent in excess of those for the same period a year ago.

What Effective Meat Distribution Means

Packing Industry Lectures—No. 8

"If the world turned vegetarian, the hay crop—now one of the most valuable agricultural products—would be practically worthless," according to F. Edson White of Chicago, who spoke Tuesday evening, April 3, as a representative of the Institute of American Meat Packers, at Mandel Hall, University of Chicago, before about 600 men from the packing industry.

Mr. White lectured on "Distribution of Meat Products." He gave brief consideration to other significant trends and tendencies within the industry, however. The occasion was that of the eighth and concluding lecture of a series on the packing industry, conducted under the joint auspices of the Institute of American Meat Packers and the School of Commerce and Administration, University of Chicago.

"Much the same is true of the corn crop, which in dollars and cents is the most valuable crop produced in the United States," Mr. White continued in part. "Something like 90 per cent. of the corn crop is fed to meat animals and thus indirectly to humans. Meat animals can turn these crops into food for humans and yet leave in the soil nearly 100 per cent. of its natural fertility. Meat is a concentrated food and meat animals apparently were invented by nature to utilize and turn into food for man those products of the fields and farms which man does not want or cannot really use.

Meat Eating and Prosperity.

"Per capita consumption of meat has a definite relation to national prosperity. As a nation there is little prospect that we will ever eat too much meat. In 1922 the average American consumed 149.7 pounds of meat per annum. In 1921 the figure was 143.2. (Editor's Note: These figures do not include lard.) In the days of great agricultural prosperity twenty years ago, per capita consumption was about 180 pounds. It is not my purpose now to discuss the reasons for the decreased consumption of meat, but I do think it permissible to point out that success in efforts to increase meat consumption will be reflected in greater prosperity on the farms and throughout the country—prosperity for the moment and also prosperity for the future, growing out of properly balanced agriculture looking toward the maintenance of soil fertility.

"Insofar as the distribution afforded by the meat packing industry aids the farmers of specializing regions to turn their various crops into food for humans, it is a real factor in assuring national prosperity. If there were no well established meat packing industry capable of distributing properly the products of live stock in the great quantities in which they are produced, the foundation of our agriculture would be swept away.

"Adequate distribution of meats over the country and over the seasons has had, and will continue to have, a most important bearing on the nation's agriculture. The greatness of the United States is founded on agriculture, and maintenance of soil fertility is essential to the nation's prosperity. Without question, live stock is the biggest factor in the maintenance of fertility."

What Meat Distribution Means.

In discussing the importance to producers and consumers of effective distribution of meats, Mr. White said in part:

"If meat products had to be marketed to the consumer as they are produced, there would be severe gluts and corresponding low prices for raw materials during a large part of the year and severe shortages and

consequent high prices during the rest of the year. By far the heaviest marketing of live stock comes in the colder months of the year, due largely to the fact that the animals cannot be marketed until they have consumed the crops of the growing season. On the other hand, the heaviest consumption of meat products is likely to come in the hot months when labor is most fully employed and energy demands in the diet are greatest.



F. EDSON WHITE.

"The manner in which the cold storage houses and the freezers are used today to prevent disastrous market gluts stands out in contrast to the distributive machinery of one or two generations past. There was then no refrigeration and meat had to be eaten immediately after the slaughter of the live animals or else the product had to be pickled or otherwise cured. There are many in the industry who can remember in their boyhood when meat packing was largely a winter job.

"In fact, the industry got its name from that day because meat was then really packed. Only territory immediately adjacent to packing houses could get fresh meat and that portion which could not be disposed of was pickled or salted, barreled and piled hill-high on the prairies adjacent to the packing plants. There the product remained until the summer consuming season arrived and the product was distributed by the transportation methods then available. In the 'good old days' of meat packing by far the bulk of the meat consumed was cured product, and those who were able to get fresh meat the year around were in exceptionally fortunate circumstances.

Wastes Done Away With.

"That was a day of meat wastes which we could not tolerate now. Hearts, livers and various other edible products which were produced in much greater amount than could be consumed locally and for which there was no demand in the cured state, were simply dumped into the river, fed to hogs, buried or incinerated. Today these same products are refrigerated and handled so satisfactorily that none of them have to be wasted and all are available in all sections of the country at all seasons of the year."

Referring at another point to the effect of fluctuations in demand, Mr. White said:

"A sudden hot wave in the East knocks the bottom out of the beef market. Housewives do not want roasts and steaks when the thermometer is around blood heat.

Sudden arrivals of well laden fishing boats at big eastern seaports usually affect the sale of meat. Thanksgiving and Christmas poultry have ruined many a well-planned beef campaign. The opening of the game season has often done likewise—though I must confess that my success as a hunter never tended to put any meat packer out of business. Fast days and feast days affect the demand for meat and there are various other factors insignificant in themselves but powerful enough in combination to change materially the demand for meat from day to day. This fluctuation in demand must be reckoned with in the daily management of the business."

GERMANS NEED FOREIGN MEATS.

Heavy importations of meat into Germany are indicated by exhaustive investigations just completed in that country.

Germany's meat production before the war was not sufficient to meet domestic requirements, despite extensive importation of concentrated animal feed. The situation today is much more unfavorable, for Germany has lost 15 per cent of her stock-raising territory, while her population has decreased only 7 per cent. The importation of stock feed has materially decreased owing to the continued depreciation of the German currency and the importation of meat will be indispensable for a long time to come to bring up to the proper standard the feeding of the German people, is the conclusion furnished by the Department of Commerce, by Mr. Charles B. Dyar, of the American Consulate at Stettin, Germany, based upon investigations made by the Hygienic Institute of the Hanover Veterinary College.

"The pronounced decline of the consumption of meat in Germany is of greater hygienic and economic importance for the future and greater productivity cannot be expected of the German people unless the standard of living is elevated," Mr. Dyar states. "Director Cuno of the Hamburg-American Line, now the German Chancellor, pointed out recently that the importation of large quantities of frozen meat is not feasible for Germany from the economic point of view unless the meat is carried in German ships. Germany has at present only six steamers, with a total meat storage capacity of 3,000 tons for this purpose, while England possesses some 280 steamers with a total cold storage capacity of 600,000 tons. Steamers of the kind needed are very expensive to build on account of the elaborate refrigerating equipment necessary and the German shippers can scarcely take the risk of having them built unless assured of the continued importation of frozen meat for years to come, and everything now indicates that this will be the case."

JAPANESE MEAT IMPORTS.

In 1922 Japan imported 532,033 kins of butter (1,3227 pounds), according to a report to the U. S. Department of Commerce, by far the larger portion of this butter coming from Australia and Canada, the United States furnishing less than 10 per cent of this total.

Of the 25,154 kins of hams and bacon imported into Japan in 1922, the United States furnished over 35 per cent of the total, with Kwantung, Great Britain, Canada and Australia furnishing practically the entire remainder. China, however, led in the exports of fresh beef to Japan, supplying over 80 per cent of the 267,739 piculs imported.

Packers' and Retailers' Delivery Problems

(EDITOR'S NOTE.—This department will be devoted to items and discussions of interest to packers and retailers in connection with their delivery and local transportation problems. Readers are invited to use this column for the obtaining of information on these subjects, and for their comments and criticisms on what appears here.)

What's Wrong with Packer Deliveries?

Bright, clean, attractive delivery equipment is in daily use by America's largest manufacturing industry in the distribution of its product. Many of the packers' trucks are worth their operating cost for advertising value alone. Furthermore, their costs are kept at as small a figure as careful supervision is able to bring about.

Under present-day conditions economy is of paramount importance in the packing industry. Consequently no policy is considered which does not contemplate the most rigid thrift. And within reasonable limits this program of economical delivery is being carried out successfully. The industry's achievements in this direction are in many respects remarkable.

No Theorists Here.

The packinghouse superintendent of transportation is a practical man. His ideas are based upon experience rather than theory. He has gotten this experience first hand, and can decide many questions off-hand under circumstances where months of theoretical work would be required to arrive at the same conclusion.

New-fangled ideas do not appeal to this man. "Try your experiments elsewhere," he says, "and if they prove successful we'll adopt them. Meanwhile we play safe and save our money."

The delivery systems of the packers have been pictured variously as bottomless pits of needless expenditure, or as ravenous ogres devouring packinghouse profits. Is either a true picture of the situation?

Packers Practice Thrift.

Packers give their customers good service in the way of deliveries. That is necessary, competition requires it.

Packers, furthermore, keep their delivery costs pared as close as they know how. That also is inevitable, because the industry could not exist if it chose to be extravagant.

Not only is the packer's delivery program on a solid basis, but the industry has in some ways occupied a position of leadership. The committee on local deliveries of the Institute of American Meat Packers has attracted much attention because of its progressive ideas, and its ac-

tivity in the field of improved delivery methods.

"What more could be asked?" you inquire.

"Always room for improvement," is the answer.

More Co-operation Needed.

Every packer has some favorite phase of delivery work in which his organization is particularly efficient. When we succeed in putting these various ideas together we will have a millenium in transportation methods.

Each packer has his own method of keeping his delivery cost records. Some of these methods are excellent, but 90 per cent of them are fragmentary in their scope.

Some packers are using horses for motor truck work. Others are using motors for horse work. Some are employing gasoline truck methods on electric trucks, and others are treating gasoline trucks as though they were electrics.

The Best Methods Pay.

The last word on transportation methods will not be spoken until our horses, our trucks and ourselves have long since become dust. But the transportation man who today makes use of ideas which his competitors will not recognize until next year is destined to have wealth, fame or both.

Closer co-operation and a more alert lookout for modern developments and improved methods and practices will bring packer delivery service to a new high level of efficiency within the next few years.

HORSE, ELECTRIC OR GASOLINE?

"In the delivery business, as elsewhere, you can't get a gold dollar for ninety cents. You get just about what you pay for."

That is the idea of E. A. Stedman, vice-president of the American Railway Express Company, as expressed in his paper on "Relative Fields and Uses of the Horse, Electric and Gasoline Truck," given before the International Delivery Association at the annual convention of this organization held at the Hotel La Salle, Chicago, on March 12-15.

"Horses have very low costs," continued Mr. Stedman. "Electrics give greater speed and greater mileage at a somewhat higher cost. Gasoline trucks are capable of even more speed, and if necessary give very greatly increased mileage, and their costs are still higher to pay for these advantages."

In speaking of his policy regarding new equipment, Mr. Stedman added that they had purchased no horses since November, 1921. During that period several hundred motor vehicles were purchased, both electric and gasoline.

"The Horse, Electric and Gasoline Truck," was the subject of a paper read by N. W. Thompson, general superintendent of The Fair, Chicago. Mr. Thompson based his discussion upon an audit of The Fair's books made at the expense of the Horse Association of America, and concluded that horses were by far the most economical for city delivery work.

Comparison Is Challenged.

A possible argument loomed when an electric truck man inquired as to the fairness of such a comparison of horses and trucks on a per day basis, with no mileage records, and with the truck costs based upon the bulked expenses of "seventeen electrics and four gasoline trucks."

The representative of The Fair who was discussing the paper stood by the comparison, and when the electric truck man did not push the matter further, he went on to say that for those concerns who found that their class of work demanded motor vehicles, electrics were the most reliable and satisfactory for route delivery.

Some voting followed to determine whether the trend was toward more or fewer horses. Although the general movement was found to be in the direction of more mechanical equipment, several operators went on record as increasing their horse equipment. One wittily remarked:

"We were running our motor trucks with horses last winter!"

SUSPENDS NEW STOCKYARDS RATES.

Suspension of tariffs increasing certain rates and charges of the East Tennessee Stockyards, Knoxville, the Newark Stockyards Company, Newark, N. J., and the Seattle Union Stockyards Company, Seattle, Wash., has been announced by the U. S. Packers & Stockyards Administration.

In the case of the East Tennessee Stockyards Company the suspension was on the ground that the proposed increases of 28 cents a bushel for corn, 15 cents a bushel for oats, 50 cents a hundred pounds for bran, shorts, and cottonseed meal did not appear to be justified. A hearing has been ordered for April 11 in the Federal Court rooms, Knoxville.

The suspension order against the Newark Stockyards Company resulted from a proposed increase of 25 cents a bushel for corn and 25 cents a hundred pounds for hay, both of which were thought to be unreasonable and not warranted at this time. The hearing has been set for April 17 in the Federal Court rooms, Newark.

The Seattle Union Stockyards Company had announced new charges for both yardage and feed.

The proposed increases in yardage charges on hogs of 3 cents a head, on sheep and goats of 1 cent a head, on horses and mules of 10 cents a head, and 25 cents a hundred pounds for alfalfa hay appeared to be unreasonable. Further objection was made to proposed additional charges for services which are now rendered as a part of the yardage service. These charges, which it is proposed to assess against all livestock bought on these yards and loaded out through truck chutes, are as follows: 15 cents a head on cattle, 10 cents on calves, 4 cents on hogs, 3 cents on sheep.

The Plain Truth

Let's do away with fancy words and face the plain, naked truth.

What is needed most in the packinghouse?

It's "EDUCATION!"

Why?

Because there are hundreds of the smaller packers today who operate plants without knowing exactly the yields and returns of a good many of their products.

It is only the large plants which can have laboratories and testing and efficiency engineers. But the owner of the smaller packing plant can know just as much about the packing business—if he only wants to know it.

How? It's only by comparison—comparing his results with those obtained by operators in the more efficient plants.

Let's cite an example which will hit your pocket-book: **What is your shrinkage on hides?** Can you give the figures exactly? How do you know that you are not losing two, three or even five per cent on your shrinkage? What does it mean to you in dollars and cents if you lose only two per cent on your shrinkage?

Information like this is worth thousands of dollars to any packer, and it is only ONE good reason why "THE PACKERS' ENCYCLOPEDIA" should be on your desk.

We may all be smart, but no one knows it all, and the experience of many people in the business can always help us.

Better order your copy now before it is too late.

Chapter One:—CATTLE

Breeds of Cattle
Market Classes and Grades of Cattle and Calves
Dressing Percentages of Cattle
Beef Slaughtering
Beef Cooling
Beef Grading
Beef Loading
Handling of Beef for Export
Beef Cutting and Bening
Plate Beef
Meat Beef
Curing Barbeled Beef
Manufacture of Dried Beef
Handling Beef Offal
Handling and Grading Beef Casings
Handling Miscellaneous Meats
Manufacture of Beef Extract
Manufacture of Oleo Products
Tallow
Handling of Hides

Chapter Two:—HOGS

Breeds of Hogs
Market Classes and Grades of Hogs
Dressing Yields of Hogs
Hog Killing Operations
Hog Cooling
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Curing Pork Cuts
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Preparation of Figs Feet

Chapter Three:—SMALL STOCK

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Cost and Return on By-Products

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Animal Glands and Their Uses
Packinghouse Chemistry
Packinghouse Refrigeration
Packinghouse Cost Accounting
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Construction of Packing Plants

Chapter Six:—VEGETABLE OILS

Vegetable Oil Refining
Compound Manufacture
Winter Oil
Hydrogenation of Oils and Fats
Manufacture of Margarin

The Packers' Encyclopedia

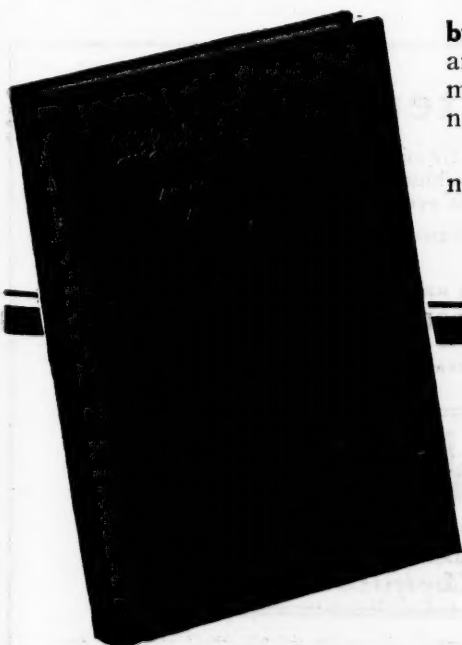
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CHICAGO



TRADE GLEANINGS

The Empire Fertilizer Co. is planning to establish a plant at Oswego, N. Y.

Swift & Company is building a new produce packing plant at Columbus, Neb.

The Kuykendal Chemical Co., Columbia, S. C., has increased its capital from \$50,000 to \$100,000.

Iverson & Burdett, Uvalde, Tex., are planning to erect a meat packing plant to cost about \$30,000.

The city of St. Cloud, Minn., is interested in establishing a poultry packing and egg plant there.

The Kirsten Packing Co.'s plant at Walnut Creek, Cal., has been sold to L. F. Helmond and others.

The Fort Smith Cotton Oil Co., Fort Smith, Ark., will erect a plant in the near future.

The Milner Packing Co., Frankfort, Ind., is going to carry out some extensive improvements in the near future.

S. Swindells & Son, New York City, has been incorporated with a capital of \$300,000 by Ralph E. Renno and others.

The McLennan County Livestock Association, Texas, is considering the erection of public abattoirs at several points.

G. F. Hoffman, Gadsden, Ala., has bought the plant of the Standard Chemical at Summerville, Ga., and will operate it.

The Marker Chemical Co., Fairmont, W. Va., has been incorporated with a capital of \$1,000,000 by R. L. Long and others.

The Standard Packing Co., Pittsburgh, Pa., has been incorporated with a capital of \$300,000 by R. B. G. Houghton, Harry J. Thomas and others.

The Cuff Packing & Provision Co., Buffalo, N. Y., has been incorporated by James J. Cuff, Joseph P. Morgan and George E. Keller, with a capital of \$500,000, to carry on a meat packing and cold storage business.

The Frederick County Products, Inc., was incorporated for \$250,000 par value preferred stock and 3,000 shares of common stock without par value. The company leases, and has an option to buy, the plant formerly operated by the J. A. Whitfield Co.

The Eckert Packing Co., Henderson, Ky., held a reception and food exhibit at its packing plant on South Green street on April 4 which attracted wide attention. Customers and guests, including hundreds of consumers, reached the plant from the

street car line in automobiles provided by the company, and luncheon was served at the plant to all visitors. The exhibit of Eckert meat products was an extensive and appetizing one, and served to boost the "eat more meat" campaign in that section.

The Douglas-Pectin Packing Corporation, Rochester, N. Y., has been organized as a result of a consolidation. The companies concerned in the merger are the Douglas Packing Co. and the Pectin Sales Co., both of Rochester, and the Douglas Packing Co., Ltd., of Coburg, Canada.

Officers of the new company are: President, Robert Douglas; vice-president, Charles Douglas; vice-president and treasurer, Watkin W. Kneath; secretary, Earl J. Neville; assistant treasurer, John J. Clingen; directors, besides the foregoing, W. A. Bender, Fairport; R. A. Mohan, Coburg; John R. Beach, Fairport; George H. Harris, Rochester; M. S. Pratt, London, England, and John F. Prow, New York.

HOW BEST TO HANDLE LIVESTOCK.

To acquaint stockyard and packing-house employees with the best methods of handling livestock was the object of a series of meetings held on April 4, 5, and 6 at the Saddle and Sirloin Club, Chicago, under the auspices of the Committee on Livestock Handling Losses of the Institute of American Meat Packers. These meetings were attended by large numbers of employees and department heads of the various meat packing companies at Chicago; by employees and heads of commission firms, and by stockyards workers and officials.

Pointing out that the amount of beef and pork rendered into inedible product during the last year because of bruises incurred in bringing animals from farms to packing plants would have provided approximately a quarter of a million people with meat for a year, R. W. Carter, of Chicago, chairman of the committee, asserted that the majority of these losses could be avoided if more care were exercised in the handling of animals while they are on the farms and from the time

they are ready for market until they reach the packing plants.

"Bruised meat cannot be used as food," Mr. Carter said in part, "and every pound of meat tanked as inedible product means a waste that is felt by every factor in the livestock and meat industry, from the producer to the consumer."

"Clubs, whips, prod poles, etc., should never be used on cattle, hogs, or other animals. These instruments may give the animals more speed, but they also cause costly bruises and other injuries."

"Livestock should be loaded and unloaded slowly and carefully. Excitement should be avoided, and the animals should not be beaten or bruised."

"In the case of fat animals in transit, much death loss can be avoided by handling the animals quietly and carefully before loading them on the cars. Shippers should bear in mind also that overfeeding just before loading and overcrowding in the cars are likely to cause death."

Should Examine Cars.

"Shippers should examine carefully the cars furnished for the shipment of their livestock. They should be sure that door fastenings, floor patchings, etc., are in acceptable condition, and that no nails, splinters, bolts, or other objects on which the animals might injure themselves project from the sides or floor of the car, and should insist that their livestock be placed in a clean car."

"They also should insist that the cars furnished for their livestock be bedded with hay or straw in cold weather, or with sand in summer. Such materials as cinders, rock dust, and coal slack never should be used as bedding."

"Loose boards, nails, sharp corners, posts, and other objects on which animals might bruise or injure themselves, should be removed from barns, pens, and fences."

To illustrate some of the points mentioned in his address, Mr. Carter used a motion picture film, "Livestock Losses and How to Reduce Them," produced by the Institute of American Meat Packers for the purpose of showing the causes and results of many of the injuries incurred in bringing livestock from the farms to the packing plants and giving practical, constructive suggestions for the proper handling of the various classes of animals.

The motion picture film was supplemented by exhibits of bruised meats and scored hides and by lantern slides shown by Dr. W. J. Embree, chief veterinarian of the Western Weighing and Inspection Bureau, who discussed briefly the avoidance of loss in transit.

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Chicago and New York

Official Organ Institute of American
Meat Packers and the American
Meat Packers' Trade and
Supply Association

Published Weekly by
The Food Trade Publishing Co.

(Incorporated Under the Laws of the State of
New York.)

at the Old Colony Building, Chicago,
Eastern Office, 15 Park Row, New York.

OTTO V. SCHRENK, President.

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GENERAL OFFICES.

Old Colony Building, Chicago.
Telephones Wabash 742 and 743.
Cable Address "Sampan," Chicago

EASTERN OFFICES.

15 Park Row, New York.
Telephone Barclay 6770.

Correspondence on all subjects of practical
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Money due THE NATIONAL PROVISIONER
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TERMS OF SUBSCRIPTION INVARIABLY IN ADVANCE, POSTAGE PREPAID.

United States	\$3.00
Canada	4.00
All Foreign Countries in the Postal Union, per year	5.00
Single or Extra Copies, each10

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(Special Report to The National Provisioner.)

Ocean Conference Trusts

The Continental Conference has an-
nounced an increase in the provision rates
from North Atlantic ports to Continental
European ports of 7½ cents per 100
pounds, and on canned goods an increase
of 7 cents, both effective April 1. This ad-
vance comes at a time when American
exporters were just beginning to feel the
revival of business on the Continent, and
will result in a further set-back to our for-
eign trade.

This conference is one of several
"marine trusts" whose sole purpose—judg-
ing from results—is to keep ocean rates at
the highest possible point, and to do every-
thing possible to handicap American in-
dustries.

The North Atlantic-United Kingdom
Conference plans on an increase of 5 cents
per 100 pounds in the rates to United
Kingdom ports, effective July 1, 1923.

As the result of negotiations with non-
conference lines American shippers suc-
ceeded in getting a reduction of the high
conference rates that had been held in
effect since the war. Now that our exports
to United Kingdom ports show indications
of revival the trust directors hasten to
collect their "pound of flesh." The real suf-
ferer—the American livestock producer—
will be thus deprived of this outlet for his
products.

These conferences openly meet in New
York City and one of their most ardent
supporters is a man who is on the gov-
ernment payroll. Press dispatches have
frequently mentioned that he was largely
instrumental in "averting threatened rate
wars."

Canada is after these conference gentle-
men, and America should take steps to
break up this arrangement. The recom-
mendations made to the Sixty-third Con-
gress as a result of the congressional in-
vestigation which began in 1912 are still
worthy of consideration. The United
States government cannot continue in the
inconsistent attitude of requiring competi-
tion between industries and individuals,
and stifling competition between ocean
carriers.

If "conferences" are vital to the ocean
carriers, it is equally important that our
shippers have some form of control over
them. As it now is, the carriers do as they
please, and the shipper has no right of
appeal.

Chemistry and Meat Packing

"Science in the meat packing industry
has become synonymous with the science
of chemistry," is the way a recent lecturer
on the packing industry, Dr. W. D. Rich-
ardson, summed up the modern meat pack-

ing business' claims to be one of the most
scientific in the world.

The chemist in the packing industry has
had a hard row. For years he had a great
many duties that were of a mixed char-
acter and prevented him from concentrat-
ing upon certain definite problems. The
chemical laboratories were not organized
into regular divisions where progress could
be made. The whole development of hy-
products has come as a result of the intro-
duction of chemists into the industry. And
that was only about thirty years ago.

And the chemist has done more than in-
troduce new products and in that way
extend the scope of the industry. He has
made it possible to control the quality and
standardize the products that have been
put out in a way that has greatly aided
the industry and put it on a higher plane
than many other industries. As was re-
cently pointed out by Thomas E. Wilson,
the control of quality which began with
the chemist in his laboratory has set going
a method for insuring better and more uni-
form products that is now practiced in all
progressive packing plants.

Australia and Meat Outlets

Australia has had a great problem to
face in the matter of its meat trade since
the slump in the price of cattle. Many
things have been suggested as remedies
for the present state of depression, among
them Oriental outlets and municipal abat-
toirs for the domestic trade.

While in several states of Australia
there are municipally controlled abattoirs,
the recent movement is for the develop-
ment of co-operative plants owned by the
cattle raisers themselves. The trouble
that, it is claimed, prevented the older
plants from becoming a success was the
fact that these plants often were owned by
people having no interest in the business
of cattle raising.

The outcome of the municipal abattoir
in Australia is in the future as yet and
is confined to the home trade. For that
reason, in spite of many statements to the
contrary, there has been no disturbance
among the existing exporting packing
companies.

However, the fact is that in the export
situation there is little better outlook than
for some time. A subsidy is evidently not
the solution to the situation, nor is the
suggestion to establish retail shops in
England. There is a chance for the devel-
opment of considerable export trade with
the orient. But it will be a limited one for
some time.

The interesting feature is that there are
so many different plans being discussed
for the bettering of the meat trade.

PRACTICAL POINTS FOR THE TRADE

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Discoloration in Sausage

Mould or discoloration in sausage, particularly the smoked product, is something that has bothered the best sausage-makers in the business. The trouble appears in many places and in different ways. Some have solved it, others have not.

On this page THE NATIONAL PROVISIONER has answered many questions concerning different phases of this problem. In a recent issue a well-known Pacific Coast superintendent outlined his experiences and experiments over a period of years. He discussed the various kinds of discoloration and their possible causes and remedies, and asked for opinions of others on the subject.

An Eastern superintendent with twenty years' experience complies with this request, and in a letter to THE NATIONAL PROVISIONER gives a clear outline of his views.

He calls attention to the chilling of the sausage material, handling through the chopper, cooler temperatures, and troubles in the drying room. He advocates a standard cure for sausage material which he thinks would remedy a lot of the trouble.

He asserts that if sausage meats are properly prepared, if the right curing formula is used, and if the product is carefully handled all the way through, and the proper temperatures observed, there should be no trouble from discoloration or mould.

His letter is as follows:

Editor The National Provisioner:

Referring to the article on discoloration in sausage which appeared in your March 24 issue of THE NATIONAL PROVISIONER under heading of "Practical Points for the Trade."

F. C. ROGERS BROKER Provisions

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431 West 14th Street

Figuring Sausage Costs

Extra copies of the "STUDY OF SAUSAGE COSTS" which appeared in the August 19th issue of THE NATIONAL PROVISIONER may be obtained upon application to THE NATIONAL PROVISIONER, Old Colony Building, Chicago, Ill.

If you did not read this analysis of the proper method of keeping track of your sausage costs, you should get a copy of this report at once and study it. Single copies may be had free of charge, as long as they last.

I have read very carefully the letter from Superintendent Brown in Los Angeles, and in response to his request will give my experience in this matter, which covers a period of about twenty years.

There are various reasons for discoloration in sausage, which appears in varying degrees.

Sausage Troubles Outlined.

Chilling Sausage Material.—The chilling of sausage material is a very important factor. For instance—in some plants beef cheek meat, pork cheek meat and other offal are not properly spread in the offal cooler. And at the same time possibly the temperature of the cooler is entirely too high to properly chill the meats. The meat will then go into cure in a heated condition; and while the product is not sour or entirely "gone," yet the cure does not act upon this meat in the proper way to overcome the animal heat which is still there because the meat had not been properly chilled.

Handling Through Chopping Machines.

When meat is cured and taken to the chopping machine it sometimes requires a very careful inspection to detect a slight odor. And if this meat is not properly handled through the chopping machines, and the necessary ingredients added at that time, then you may look for discoloration in any part of the sausage, and not in any particular spot.

Curing Temperatures Too Low.—Again,

sausage material is often cured in a cooler where the temperature is entirely too low for the meat to cure in the specified length of time. The sausage maker assumes that this meat has been long enough in cure to insure satisfactory results, whereas the cure has not thoroughly penetrated the meats. And if this product is not thoroughly smoked and sufficiently cooked—particularly if it should happen to be undercooked—you may look for discoloration in the center of the product, varying in size from a ten-cent piece upwards.

Cooler Temperatures Before Smoking.—

There is another danger, where it is customary for the sausage department to stuff the product in containers and allow it to hang in the cooler overnight previous to smoking. Very frequently the temperature of the cooler will drop below freezing point during the night. This does not give the meat any advantage in curing in containers, and will invariably show a ring on the outside of the sausage just inside the casing.

This is also true of summer sausage. It has been my experience in manufacturing summer sausage in a cold climate, where the temperature would reach 40° below zero, and the heating systems in the dry rooms would freeze up during the night, and fresh product would always suffer by showing a ring in the same manner.

Of course the product that was sufficiently dried would not be affected.

Troubles in Summer Sausage Dry Room.—As a rule there are two evils in the summer sausage dry room to contend with. One is not to get the temperature too high, say not higher than 52° to 54°. The other is, under no circumstances to subject the product to a temperature anywhere near the freezing point. We could always look for a ring on the summer sausage if we lost control of the temperatures in this respect.

A Remedy Suggested.

The Los Angeles superintendent states: "I have heard any number of reasons for this, but do not believe that the correct solution has yet been offered to overcome the exact trouble." He refers to discoloration or mould in sausage.

I should like to offer the following solution which I think will overcome this difficulty beyond any doubt:

1. **Handling and Chilling.**—The handling and chilling of sausage material must receive close attention and see that meat is sweet going into cure.

2. **Standard Cure for Sausage Material.**—Establish a standard cure for sausage material, with an understanding that meats are not to be used that are not fully cured. And do not make a practice of using meat that is overcured. In other words, follow the curing of the product very closely, and see that it is used at cured ages. And if not used, give the product proper attention and have it transferred to lower temperatures, so that it will not continue to deteriorate.

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3. **Handling of Sausage Casings.**—Make a careful inspection of sausage casings and see that they are always in good condition. Pay strict attention to the soaking of sausage casings.

Oftentimes casings are put in soak in the morning in warm weather, with the intention of stuffing certain product early in the day. But the arrangements are changed, in some cases through giving preference to orders received on short notice for shipment the same day. Casings are frequently forgotten in soak, and they are allowed to remain in warm water, which sours, and when they are used they are not washed with fresh water and stripped of the soaking water before being used.

In conclusion, I will say that if meats are properly handled, and the curing formula is right, and the product is followed throughout the course of manufacture very carefully in regard to handling of meats, temperatures, etc., there should be no reason for any discoloration of sausage.

Yours truly,

AND OLD SUPERINTENDENT.

(EDITOR'S NOTE.—Others who have had experience with the troubles discussed by these two superintendents are invited to write their opinions for the benefit of readers of THE NATIONAL PROVISIONER and the trade at large.

Curing Frozen Hams

The following inquiry is from a small packer in the Middle West:

Editor The National Provisioner:

Please give me whatever information you can in regard to curing frozen hams for boiling.

In thawing frozen hams, which is the best procedure, to let them thaw in a cooler, to thaw them in ordinary room temperature and chill, or to thaw them in cold water and chill as one ordinarily would?

Also, does the time required for curing frozen hams vary any from the time for curing fresh hams?

Hams cured for boiling purposes should not be pumped in the body. Many concerns are curing without any pumping whatever, while others are giving hams

Questions and Comments

Questions on any subject affecting packinghouse operation, sausage-making, curing, by-products, etc., may be submitted to THE NATIONAL PROVISIONER, and they will be answered as fully and speedily as possible. Tell us your troubles!

Comment and criticism on any advice appearing on this page are invited. Perhaps you have a better method to suggest, or you may add something that has been omitted. Address Editor, THE NATIONAL PROVISIONER, Old Colony Building, Chicago, Ill.

two strokes in the shank and one in the blood vein.

The best way to thaw hams is to submerge them in 60 degree strength, plain pickle, keeping the hams submerged in the pickle. Hams defrosted in this manner will show much better color than when thawed in natural temperatures, and the best experts do not approve of cold water.

The time for curing frozen hams is the same as the curing of fresh hams.

Cause of Sour Head Cheese

A sausagemaker in the Middle West writes for information on trouble he is having in making head cheese. He says:

Editor, The National Provisioner:

What causes head cheese to get gassy sometimes in a small smoke house, if the product is cold when put in?

There is no reason why the head cheese should sour in the smokehouse at proper temperatures, providing the product is in good condition going into the smokehouse.

It may be possible that you are using an accumulation of tongue gullets that have been cooked and allowed to remain in the cooler until the batch of head

cheese is made. They contain a lot of grease and get "gassy" very quickly.

We are inclined to think that it is something of this nature that is causing your head cheese to sour in the smokehouse, and would appreciate further information. Send us the formula you are working on that is causing you the trouble.

Keeping Summer Sausage

More packers are taking up the manufacture of summer sausage as its popularity grows with consumers. But there is still a great deal to be learned about making and keeping the product. A Western packer writes:

Editor The National Provisioner:

We are very much interested to know of the best method of keeping summer sausage, made during the winter months, until the middle of the summer.

We were wondering whether or not it would be possible to pack it in boxes and put it in cold storage.

The very best method of keeping fully dried summer sausage is to carry it in a cooler at an even temperature of 40° F. To obtain the very best results the product should be hung in sections, banked closely together.

If the product is thoroughly dried and the cooler is perfectly dry, and you maintain an even temperature of 40° F., you are not taking any great risk. But if some of the product is not sufficiently dry it may mould in the boxes, in which case you would be put to the expense of opening the boxes and washing the product. Therefore, it is recommended that the product be hung in sections, as here mentioned.

DANISH BACON HAVING TROUBLES.

English consumers are raising the same objection to Danish bacon which they hold to certain types of American bacon, according to recent reports. It is claimed that the bacon is too fat and to remedy this condition the Danish co-operative packinghouses have notified farmers that on and after Feb. 19 the weight of hogs accepted for slaughter would be reduced. This means of meeting the demand of the Danish market has been discussed on several occasions by packers in the United States, but no acceptable means of following this production have been found.

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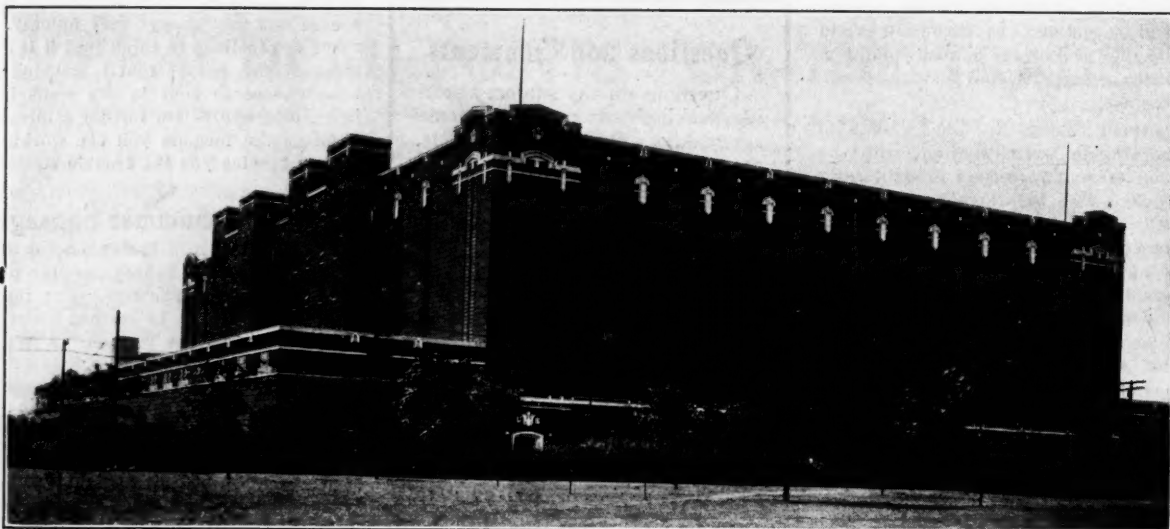
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PROVISIONS AND LARD

WEEKLY REVIEW

All articles under this head are quoted by the barrel, except lard, which is quoted by the hundredweight in tierces.
pork and beef by the barrel or tierce and hogs by the hundredweight.

Prices Rally — Hogs Firm — Movement Lighter — Stocks Gains Moderate — Hog Receipts Excellent.

The hog movement conditions of the past week have not shown the apprehended reduction in receipts anticipated, while on the other hand, the price of hogs has been excellently well maintained, so that the returns to shippers have been held up in good shape, although there has been quite a strong feeling that the movement would shortly fall off particularly if the price of hogs decline. As the price of hogs did not decline materially, in keeping with the action of the product market there were some who looked for a recovery in the price of product.

The hog receipts the past week at seven leading points were 681,000, against 380,000 last year, cattle 174,000, against 150,000, and sheep 205,000, against 163,000. With this tremendous movement of hogs the average price at Chicago was only 5c lower for the week than the preceding week, and this week hogs started above last week's average.

Hog Receipt Comparisons.

The total receipts of hogs at Chicago for the past month were 925,596, an increase of 282,232 over last year, while the number shipped increased only 65,473, indicating a gain in local packing of 217,000 over last year. Yet with all that gain in packing, the increase in lard stocks was only 2,200,000 lbs., against an increase last year of 13,500,000 lbs., and a gain in total meat stocks was only 10,000,000 lbs., against a gain last year of 11,000,000 lbs., showing that the increase in kill was taken care of in the movement from Chicago.

Chicago Stocks of Provisions.

The Chicago statement of stocks compared with the end of February this year and last year follow:

	1922	1923
Pork—New, bbls.	March 31, 862	Feb. 28, 1,052
Other, bbls.	24,713	21,894
Lard—New, lbs.	8,704,646	7,390,011
Other, lbs.	4,790,830	3,932,700
Total, lbs.	13,495,476	11,322,711
Short ribs, lbs.	3,995,131	1,659,250
Total meats, lbs.	124,877,630	114,753,692

	1922	1923
Pork—New, bbls.	March 31, 252	Feb. 28, 370
Other, bbls.	28,252	23,190
Lard—New, lbs.	28,572,038	16,002,647
Other, lbs.	5,141,505	4,240,430
Total, lbs.	33,713,543	20,243,077
Short ribs, lbs.	124,273	240,487
Total meats, lbs.	86,828,538	75,347,388

Lard Shipments Near Record.

The export movement of product was very heavy for the last week, the lard

shipments amounting to 40,071,000 lbs., which is nearly up to the record of the year, and compares with 1,875,000 lbs. last year. Exports of meats were 19,482,000 lbs., compared with 10,366,000 lbs. a year ago. The fact that the export movement, particularly of lard, keeps on such a large scale, makes it difficult for bearishly inclined operators to force the market down. With stocks at Chicago only 13,495,000 lbs., or less than one-third of the shipment for one week, it shows that the supplies pressing on that market, are not suggestive of any hedging accumulation or pressure of a kind which will be disturbing to holders.

Home Demand Takes Product.

Packing operations have continued on such a scale for so long and the product has been absorbed, that there is a very pronounced feeling that the domestic consumption is taking care of the output in a most satisfactory way. If there is a maintenance of the exports like that recently seen, it will tend to prevent a very much further accumulation in stocks, if any, and influence a rapid decrease when the usual time of the year arrives for such decrease. In connection with this, the March 15 report of fish stocks shows a comparatively small supply on hand, the amount of frozen fish being only about half of the average.

An interesting study by a dry goods authority of the number of sheep in the country as a factor in the wool market was rather impressive showing that the private investigation indicated nearly 5 per cent more sheep in the country than reflected by the Government report, but that the conditions surrounding the sheep industry were very satisfactory, not only as regards prices for livestock, but prices for wool, and on that account there was no special apprehension as to the influence of such increased stock on the market.

Foreign Exchange Steady.

The foreign exchange conditions have been comparatively steady the past week. The support of the German exchange is a very helpful factor in the export movement of lard. The shipments of lard the past week included 16,591,000 lbs. to Germany, 5,241,000 lbs. to Antwerp, and 7,983,000 lbs. to Holland, all pointing to the need of fats in the low countries, and central Europe. This movement has kept up so long that it is bringing about the belief that the pressing fat necessities are compelling the buying of this product and that the demand may keep up for a considerable time longer.

PORK.—The market was dull and

steady with mess at New York \$27@27.50, family \$32@33, and short clears \$22@29. At Chicago mess pork was quoted at \$25.

LARD.—Market steadier but cash trade rather quiet, domestic and export. At New York prime western was quoted at 12.10@12.20c, middle western 11.90@12c, New York City 11½@11¾c, refined to the continent 13c, South American 13¼c, Brazil kegs 14¼c, and compound 13½@13¾c asked. At Chicago regular lard in round lots was 11½@11¾c, loose lard .80 under May, and leaf lard .60 under May.

BEEF.—The market was quiet but firm with mess at New York \$17.50@18.50, packer \$16.50@17.50, family \$20@21.50, extra India mess \$32@34, No. 1 canned roast beef \$3.25, No. 2 \$5.25, and sweet pickled tongues \$55@65 per bbl., nominal.

SEE PAGE 43 FOR LATER MARKETS.

EXPORTS OF PROVISIONS.

Exports of provisions from the Atlantic and Gulf ports for the week ending March 31, 1923, with comparisons:

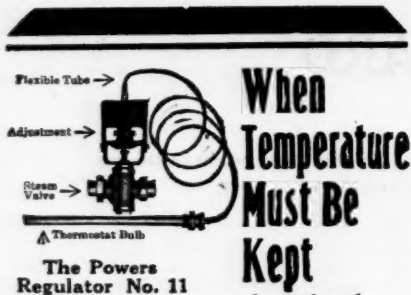
	PORK, BBLs.	From Nov. 1, 1922, to Mar. 31, 1923.
	Week ended Mar. 31, 1923.	Week ended Apr. 1, 1922.
United Kingdom.....	238	45
Continent	265	100
So. and Cent. Amer. ....	.....	.....
West Indies.....	55	450
B. N. A. Colonies.....	.....	.....
Other countries.....	.....	270
Total	558	595
	BACON AND HAMS, LBS.	From Nov. 1, 1922, to Mar. 31, 1923.
United Kingdom.....	10,165,150	3,305,000
Continent	7,133,000	817,000
So. and Cent. Amer. ....	.....	.....
West Indies.....	.....	3,003,400
B. N. A. Colonies.....	.....	22,300
Other countries.....	.....	501,700
Total	17,298,150	4,122,500
	LARD, LBS.	From Nov. 1, 1922, to Mar. 31, 1923.
United Kingdom.....	7,555,798	1,312,400
Continent	21,920,177	5,734,876
So. and Cent. Amer.	60,000	1,084,673
West Indies.....	11,000	5,389,000
B. N. A. Colonies.....	.....	61,000
Other countries.....	.....	176,400
Total	29,546,975	7,047,276

	Pork, lbs.	Bacon and hams, lbs.	Lard, lbs.
From—			
New York.....	503	14,168,150	27,102,975
Portland, Me.....	.....	1,509,000	1,134,000
Porton.....	.....	.....	50,000
New Orleans.....	35	4,122,500	7,027,276
St. John, N. B.....	.....	1,581,000	1,102,000
Total, week	558	17,298,150	29,546,975
Previous week	1,880	15,516,000	20,684,820
Two weeks ago.....	3,081	18,911,000	22,700,004
Cor. week, 1922.....	505	4,122,500	7,027,276
Comparative summary of aggregate exports, in lbs., from Nov. 1, 1922, to March 31, 1923:			
	1922 to 1923.	1921 to 1922.	Increase.
Pork	5,087,800	2,057,400	3,030,400
Bacon and hams.....	339,029,550	216,419,644	122,609,906
Lard	401,669,753	275,273,748	126,396,005

Estimated Consumption Per Capita of Each Kind of Dressed Meat and Lard in the United States for Recent Calendar Years as Compared with 1900 and 1909.

Class.	1900 lbs.	1909 lbs.	1917 lbs.	1918 lbs.	1919 lbs.	1920 lbs.	1921 lbs.	1922 lbs.
Beef	79.2	76.2	62.2	65.2	58.0	61.2	57.8	61.4
Veal	10.0	7.5	6.5	7.4	7.7	7.9	7.0	7.3
Mutton and Lamb	7.7	6.6	4.9	4.8	5.9	5.1	6.2	5.0
Pork (excluding lard)	84.6	68.6	58.5	67.6	68.6	69.0	72.9	76.0
Total Meat .....	.....	158.9	132.1	145.0	140.2	143.2	143.9	149.7
Lard .....	.....	11.6	11.7	13.6	12.8	13.1	11.3	14.1
Total Meat and Lard .....	.....	181.5	143.8	158.6	153.0	156.3	155.2	163.8

Note: These figures do not include the weight of the so-called extra-edible parts such as livers, hearts and tongues. It is estimated that these parts offset the weight of the bones and waste of the dressed animal. Separate figures for lard consumption per capita in 1900 are not available; hence, the figure 84.6 pounds includes both pork and lard. Figures for 1900 and 1909 are from the "Meat Situation in the United States." Figures for the other estimates by the Bureau of Animal Industry. The compilation was made by the Institute of American Meat Packers.



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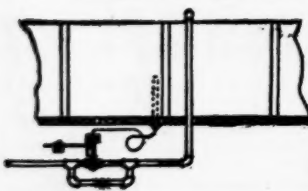
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PROVISION OUTLOOK NOT BULLISH. Biggest Stocks of Some Products for Past Sixteen Years.

(Letter to The National Provisioner from James A. Duggan of E. Lowitz & Co.)
Chicago, April 4, 1923.

The mid-week top on hogs was 8.60c; average is 8.40c. The narrowest spread since 1916 at this period.

Receipts of hogs in Chicago have been only moderate so far this week, but in the West have been heavy.

The hog receipts in 1923 to date at 20 markets are 11,919,000—over 300,000 more than for a like period last year.

At this time last year and two years ago hogs were selling around 10½c. Some are looking for lighter receipts during April, anticipating bad roads and the farmer giving all his time to putting in the crops. Also some think this will have the effect of advancing the hog markets.

We do not anticipate any noticeable cutting of the receipts, but should such conditions develop, it only means an accumulation that will come later and lower hogs.

The trade in hog meat is not good. There is still a good foreign demand for lard, but we have noticed that often the demand drops suddenly. There are 27,290,000 lbs. of lard on hand as against 44,675,290 lbs. in the seven principal packing centers of the country. Lard increased at these markets during March about 5,000,000 lbs. Stocks of ribs are about 4¼ million lbs., as against less than a half million pounds last year.

The stocks of dry meats are nearly 17,000,000 lbs. greater than they were at this time last year. That looks burdensome. Stocks of hams are over 140,000,000 lbs., or 51,000,000 lbs. greater than last year.

The total cuts of meats are 324,619,432 lbs., 109½ million pounds greater than last year.

Nothing to Bull Provisions.

We see nothing to bull provisions on with these heavy receipts and the supply of hogs keeping very heavy. Lard would get a little advance temporarily.

The measure on the strips of cut meats during March is the heaviest in 16 years, except in 1911. Four times during this period the stocks decreased during March. An increase of 3,000,000 hogs in the first three months of this year, as compared to last year is worthy of consideration. It means one pound on the buying side of the market.

Cheap hams have stimulated the consumption somewhat. If hams are kept at a moderate price, the present heavy stocks of hams with the future liberal accumulations will probably go into consumption timely, thereby avoiding any carry over.

BRITISH BACON AND HAM IMPORTS.

Imports of bacon and hams into Great Britain for the first two months of this year from all sources with comparison for the two preceding years.

These figures are of considerable interest and the heavy supplies received in Great Britain this year fully explain the recent low basis of prices prevailing on British markets for all classes of bacon.

BACON.			
	1921.	1922.	1923.
	Cwts.	Cwts.	Cwts.
January—			
Denmark	129,495	181,816	239,407
Canada	167,554	57,847	66,946
U. S. A.	140,938	201,360	452,072
Other countries	22,805	12,769	14,406
	460,792	433,792	772,836

HAMS.			
	1921.	1922.	1923.
	Cwts.	Cwts.	Cwts.
U. S. A.	21,232	71,679	118,601
Canada	2,001	6,336	5,255
Other countries	555	3,214	246
	23,788	81,229	124,101

BACON.			
	1921.	1922.	1923.
	Cwts.	Cwts.	Cwts.
February—			
Denmark	137,874	139,045	261,071
Canada	77,684	39,071	55,188
U. S. A.	192,659	210,925	280,079
Other countries	35,291	29,542	15,271
	443,488	418,583	611,609

HAMS.			
	1921.	1922.	1923.
	Cwts.	Cwts.	Cwts.
U. S. A.	32,292	114,580	135,171
Canada	980	7,941	4,981
Other countries	790	272	442
	34,062	122,793	140,594

GERMAN HOG IN HARD LUCK.

German farmers are up against it when it comes to stock feeding. The German hog business before the war prospered through the abundant supplies of cheap Russian barley. Mr. Alfred P. Dennis, special representative of the Department of Commerce reports. Young pigs were started on skim milk, helped along by alfalfa and other pasturage, and were later fattened on barley and potatoes. Russian barley is no longer procurable, and the average German potato crop for the last three years was only half of the pre-war yields, but, even greater than this, the direct per capita consumption of potatoes increased from 440 lbs. in 1914 to 660 lbs. in 1921, of fifty per cent.

This phenomenon of increased human potato consumption in the face of lower production is connected with the widespread, post-war substitution of potatoes for bread. The hog industry has been forced to bear the brunt of the increase in potato consumption, and as a consequence the German hog has been brought back to the position of a domestic animal, subsisting principally upon table scraps and milling offals. Under the circumstances, German business in American hog products is encouraging, with a better outlook for future dealings.

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TALLOW, STEARINE, GREASE AND SOAP

WEEKLY REVIEW

TALLOW.—The market was fairly active and somewhat steadier, though no price changes were made, sales being reported of 750,000 to 1,000,000 lbs. of extra at New York at nine cents, with offerings more tightly held, and with the foreign markets firm. The west reported an easier tone, but South America was strongly held and reported difficult to buy for shipment, while at Liverpool Australian tallow was unchanged following the holidays, with fine 41s 6d, and good mixed 42s.

At New York prime city was quoted at 8½¢ nominal, special loose 8½¢, extra at nine cents, and edible 10½¢@10¾¢. At Chicago edible was quoted at ten cents for the top, fancy and choice 9½¢@9¾¢, prime packers' 9¢@9½¢, and prime country at nine cents asked.

STEARINE.—The market was easier, with some small sales of oleo at New York at 10½¢, but the better feeling in tallow and in cotton oil made for limited offerings on the decline, with some looking for a better market as the warmer weather comes around, with the result that oleo was held at 11¢ later in the week, with offerings limited. At Chicago the market was easier, with oleo quoted at 10½¢@10¾¢. At New York lard stearine was 14½¢ nominal, and at Chicago 13½¢@14¢.

OLEO OIL.—The market was dull and steady with extra at New York 14½¢ nominal, medium 12½¢, and lower grades 11½¢. At Chicago extra was 13¢@13½¢.

SEE PAGE 43 FOR LATER MARKETS.

LARD OIL.—Irregularity in lard, with the market heavy at times, resulted in freer offerings of lard oil, and an easier undertone, with demand limited. At New York edible was quoted at \$1.18@1.22 per gallon, extra winter \$1.02@1.05, extra at 98¢@1; extra No. 1 at 94¢@96¢, No. 1 at 92¢@94¢, No. 2 at 90¢@92¢.

NEATSFOOT OIL.—Demand was reported as quiet, but the undertone was steady, with offerings rather light. Pure oil at New York was quoted at \$1.02@1.04 per gallon, extra at 97¢@98¢, No. 1 at 92¢@94¢, and cold pressed at \$1.28@1.35.

GREASES.—The market was rather quiet and more or less unsettled, with buyers watching closely the developments in tallow, and with holders showing little disposition to make concessions. An easier feeling in the west, where choice white grease was reported more plentiful, had some influence. At New York yellow and choice house were quoted at 8½¢@8¾¢, choice brown at 8½¢, and white 10½¢@10¾¢. At Chicago brown and house were quoted at 8½¢@8¾¢, yellow 8½¢@8¾¢, and choice white 9½¢@9¾¢.

NEW YORK LARD EXPORTS.

Exports of lard from New York from April 1 to April 3, 1923, according to unofficial reports, were 3,501,999 lbs.; tallow, 80,000 lbs.; greases, 597,600 lbs.; and stearine, 166,800 lbs.

COTTONSEED OIL EXPORTS.

Exports of cottonseed oil from New York from April 1 to April 3, 1923, according to unofficial reports, were 50 bbls.

EASTERN FERTILIZER MARKETS.

(Special Report to The National Provisioner.)

New York, April 4, 1923.—New York ground tankage was sold this week at \$4.25 and 10c, and while the producers are asking more money, the chances are that the next sales will be even under this figure. The demand does not amount to anything and considerable Canadian tankage is being offered on this market at low prices, both ground and unground.

When it comes to blood that material seems to have been unsaleable for the last three weeks. A few cars have been offered all the way from \$4.90 down to \$4.50 per unit with no buyers. Quite a little bone-meal, both raw and steamed, has been sold at slightly lower prices than prevailed some time ago.

The demand for liquid stick has also fallen off but there are very few offerings in this market.

Nitrate of soda and sulphate of ammonia are both in demand and the stocks of nitrate are very light.

Packinghouse By-Products Markets

Blood.

Chicago, April 5, 1923.

There is very little surplus of blood. Packers' ideas are higher than those of buyers. However, packers are well situated and are using their own supplies of blood.

Unit ammonia.

Ground \$4.10@4.25
Crushed and unground..... 3.75@4.00

Digester Hog Tankage Materials.

There has been no trading at all. Buyers have been under sellers' ideas all along the line.

Unit ammonia.

Ground, 11½ to 12% ammonia..... \$3.25@3.50
Unground, 10 to 11% ammonia..... 2.90@3.15
Unground, 7 to 9% ammonia..... 2.65@2.80

Fertilizer Tankage Materials.

This market has been very quiet this week as it is late in the season. Quotations are as follows:

Unit ammonia.

High grade, ground, 10-11% ammonia... \$3.25@3.35
Lower grade, ground, 6-9% ammonia.... 2.90@3.15
Medium to high grade, unground..... 2.40@2.80
Low grade and country rend., unground. 2.15@2.30
Hoof meal 2.65@2.75
Liquid stick 2.60@2.75
Grinding hoofs, pigs' toes, dry..... 32.00@34.00

Bone Meals.

Bone meals are fairly steady with some trading and perhaps a little easier in price. They slumped with fertilizer. But there ought to be a real demand starting within 60 days or so.

Per ton.

Raw bone meal..... \$36.00@38.00
Steamed, ground 23.00@25.00
Steamed, unground 19.00@21.00

Cracklings.

Beef cracklings are easy. Pork cracklings on the other hand are scarce and the demand is good.

Per ton.

Pork, according to grease and quality... \$70.00@87.50
Beef, according to grease and quality... 50.00@65.00

Glue and Gelatin Stock.

Jaws, skulls and knuckles are selling up

CHEMICALS AND SOAP SUPPLIES.

(Special Wire to The National Provisioner.)

New York, April 3, 1923.—Latest quotations on chemicals and soapmakers' supplies are as follows:

Seventy-six per cent caustic soda, \$3.70 @ 3.80 cwt.; 98% powdered caustic soda, 4¼¢@4½¢ lb.; 58% carbonate of soda, \$2.00@2.35 cwt.

Clarified palm oil, in casks of 2,000 lbs., 8¼¢@9¢ lb.; commercial yellow olive oil, \$1.20 gal.; olive oil foots, 9½¢@9¾¢ lb.; East India Cochin coconut oil, 13¢ lb., duty paid; Cochin grade coconut oil, domestic, 11¢ lb.; Ceylon grade coconut oil, 10½¢ lb.

Prime summer yellow cottonseed oil, 12½¢@13¼¢ lb.; soya bean oil, 12¢@12¼¢ lb.; domestic linseed oil, \$1.13@1.15 gal.; crude corn oil, in bbls., nominal, 12½¢ lb.; peanut oil, in bbls., New York, deodorized, 17¢@17½¢ lb.; peanut oil, in tanks, f. o. b. mills, 14¢ lb.

Prime city tallow, extra, 9¢ lb.; dynamite glycerine, nominal, 16½¢@17¢ lb.; saponified glycerine, nominal, 12½¢ lb.; crude soap glycerine, nominal, 11¢ lb.; chemically pure glycerine, nominal, 18¢@18½¢ lb.; prime packers' grease, nominal, 8¼¢@8½¢ lb.

to \$46. Hide trimmings are \$18.50 to \$21.50.

Per ton.
Calf stock \$32.00@38.00
Edible pig skin strips..... 75.00@80.00
Rejected manufacturing bones..... 55.00@60.00
Horn piths 40.00@42.50
Cattle jaws, skulls and knuckles..... 38.00@40.00
Junk and hotel kitchen bones..... 18.00@21.50
Sinews, pizels and hide trimmings..... 18.00@21.50

Mfg. Bones, Horns and Hoofs.

This market is about the same as last week. Manufacturing hoofs are easier, probably because fertilizer hoofs are lower.

Per ton.
No. 1 horns..... \$275.00@300.00
No. 2 horns..... 225.00@250.00
No. 3 horns..... 150.00@200.00
Culls 32.00@34.00
Hoofs, black and striped, unassorted... 35.00@38.00
Hoofs, white, unassorted..... 50.00@60.00
Round shin bones, unassorted, heavies 85.00@95.00
Round shin bones, unassorted, light... 70.00@80.00
Flat shin bones, unassorted, heavies... 65.00@70.00
Flat shin bones, unassorted, lights..... 55.00@60.00
Thigh bones, unassorted, heavies..... 85.00@95.00
Thigh bones, unassorted, lights..... 70.00@80.00

Hog Hair.

Demand for hog hair has continued steady. Coil dried winter processed has sold 2¼¢ f. o. b. production points and 7¼¢ for winter processed.

Pig Skin Strips.

The market has been about steady with a fair amount of trading. No. 1 tanner stock sold at 5¼¢ per lb., with No. 2's and 3's going for gelatin purposes, if government inspected and frozen, at around 3¾¢ lb. basis Chicago.

CATTLE SHIPMENTS AT MONTREAL.

It has been announced that for the shipment of Canadian cattle to the United Kingdoms the ports of Glasgow, Aberdeen, Birkenhead, Bristol, Southampton, Newcastle-on-Tyne, Manchester and Cardiff will be available for landing, according to a report to the U. S. Department of Commerce. The Canadian Government is making every effort to secure the export of only the better type of steers, animals weighing not under 1,000 pounds and under three years old, and to secure uniform quality and supply so as to assist the trade.

Margarine Production Three Times Pre-War

The value of oleomargarine and other butter substitutes manufactured by establishments engaged primarily in this business amounted to \$39,177,000 in 1921, compared with \$79,816,000 in 1919 and \$15,080,000 in 1914, a decrease of 51 per cent from 1919 to 1921, but an increase of 160 per cent for the seven-year period 1914 to 1921. In addition, oleomargarine was also manufactured by slaughtering and meat packing establishments and as a subsidiary product by establishments engaged in other industries to the value of \$9,660,000 in 1921, \$41,969,000 in 1919, and \$8,827,000 in 1914.

Of the 45 establishments reporting in 1921, 9 were located in Illinois; 6 in Rhode Island; 5 in New Jersey; 4 each in Maryland, Missouri and Ohio; 3 each in California and Wisconsin; 2 each in Massachusetts and New York; and 1 each in Indiana, Minnesota and Washington.

In January, the month of maximum en-

ployment, 2,636 wage earners were reported, and in July, the month of minimum employment, 1,538—the minimum representing 58 per cent of the maximum. The average number employed during 1921 was 2,641 as compared with 2,851 in 1919 and 917 in 1914.

The figures for 1921 are preliminary and subject to such change and correction as may be found necessary from a further examination of the original reports.

The statistics for 1921, 1919 and 1914 are summarized in the following statement:

	1921.	1919.	1914.
Number of establishments	45	42	17
Persons engaged	2,782	3,868	1,265
Proprietors and firm members	1	1	1
Salaried employees	741	1,016	347
Wage earners (average number)	2,041	2,851	917
Salaries and wages	\$4,569,000	\$5,168,000	\$1,082,000
Salaries	1,841,000	1,984,000	498,000
Wages	2,728,000	3,184,000	584,000
Cost of materials	28,062,000	66,043,000	10,257,000
Value of products	39,177,000	79,816,000	15,080,000
Value added by manufacture*	11,115,000	13,773,000	4,823,000

*Value of products less cost of materials.

VEGETABLE OILS IN NORWAY.

Conditions within the margarine industry of Norway during the year 1922 have been summarized by a leading manufacturer as follows:

The margarine industry of Norway is about to re-enter pre-war channels after having passed through all of the difficulties which arose as a result of the world war. All government restrictions have been repealed, prices are not subject to fixation, and as a result competition is now as keen as it ever has been. Production of margarine in Norway was about on the same level in 1922 as in 1921.

During the year two small margarine factories were established, one in eastern and one in northern Norway. During the war exports of margarine stopped entirely. It seems to be difficult to resume these exports, and at present no margarine is exported from Norway with the exception of the small quantities which are delivered to Norwegian vessels in foreign waters. During the year a small quantity of margarine was imported into Norway from Holland.

Prices on raw products fluctuated considerably during the year and were at the year's close somewhat higher than at its beginning. In spite thereof margarine prices were reduced by from Kr. 0.45 to Kr. 0.50 per kilogram during the year. This is said to be due to more favorable exchange rates. The results of the year's activities for margarine manufacturers were different, depending upon the conditions under which raw products were purchased. The year 1922 must be characterized as having been fairly satisfactory for the Norwegian margarine industry. Prospects for 1923 are said, however, to be decidedly poor. Competition among the manufacturers has reduced prices to such a level that, based on costs of raw products, profits are out of the question.

A/S Lilliborg Fabrikker, vegetable oil refiners, announced on or about January 16, 1923, an increase in its capital stock from Kr. 2,000,000 to Kr. 3,000,000. This is a result of the recent purchase of Stavanger Oljemlle.

Imports of vegetable oils to Norway in November, 1922, were as follows: November, 1922, 1,759,090; November, 1921, 1,400,191; January-November, 1922, 16,021,749; January-November, 1921, 14,915,204. By far the largest part of the imports were coconut and peanut oil.

NEW STUDY OF BOLL WEEVIL.

A new and elaborate statistical study of the influence of various factors in the control of the cotton boll weevil, is to be made by the U. S. Department of Agriculture. Mobilization of the department's full force of statisticians and entomologists is taking place, an advance guard of statisticians from the Bureau of Agricultural Economics having already moved to the Tallulah, La., station of the Bureau of Entomology to confer with entomologists there.

The next move will be an analysis of the thousands of records and observations at the Tallulah station made by entomologists covering the entire cotton belt over a number of years. Statistical methods of examining the comparative effect of various control methods will then be worked out.

A widespread inquiry will also be made next fall through the crop reporters of the Bureau of Agricultural Economics as to the relation of various methods of control employed this year to the yield of cotton

obtained. It is expected that these studies will develop important data that will permit the planning of a really effective offensive against the cotton pest.

PRESS CLOTH STANDARDS.

At the request of a member of the Interstate Cotton Seed Crushers Association, and in co-operation with the Association, a study of the percentages of oils and moisture was made on various commercial press cloths in the textile laboratories of the U. S. Bureau of Standards.

The results of this investigation warrant the selection as standards for this material the following percentages: Moisture, 11 per cent; oil, 5 per cent; water soluble, 2½ per cent.

This press cloth used in the presses of the oil extraction industries requires great strength and resiliency, necessitating the use of hair to a large extent. The purchases made on a weight basis make the various percentages of other ingredients of primary importance.

VEGETABLE OILS IN JAPAN.

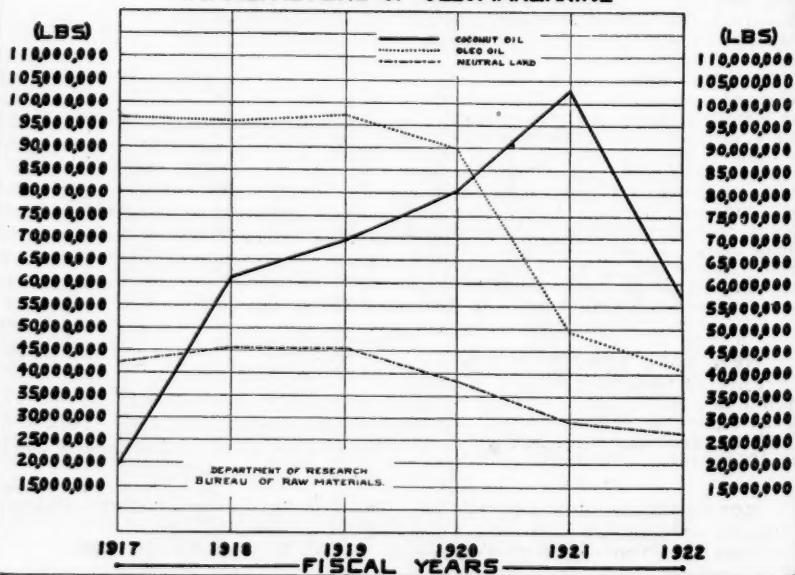
The vegetable oil market has of late showing greatly increased activity. The bean cake and bean oil market has been especially active and prices have been steadily advancing, according to a report to the U. S. Department of Commerce. The price of perilla oil has also shown a remarkable increase due to the scarcity of seed and the consequent very high prices. Dalren exported to the United States during January, the following: Bean cake, 2,342,961 pounds; bean oil, 1,088,840 pounds; perilla oil, 864,945 pounds.

OLIVE CROP OF GREECE BIG.

Reports indicate that the olive crop of Greece for the present year will greatly exceed that of 1921, according to a recent report to the U. S. Department of Commerce.

The olive crop of the Pilon district has been very rich this year. There are 2,000,000 okes left over from last year and the 1922 crop is estimated at 12,000,000 okes. For this reason the inhabitants of the district have requested that they be allowed to export olives. Consumers are, however, of the opinion that such exportation should not be permitted, in order that low prices for olives and olive oil may maintain.

DECLINING USE OF COCONUT OIL IN THE MANUFACTURE OF OLEOMARGARINE



VEGETABLE OILS

WEEKLY REVIEW

THE NATIONAL PROVISIONER is Official Organ of the Interstate Cottonseed Crushers' Association, the Texas Cottonseed Crushers' Association, South Carolina Cottonseed Crushers' Association, the Georgia Cottonseed Crushers' Association and the Mississippi Cottonseed Crushers' Association.

Trade Quieter—Market Stronger—Refiners and Commission Houses Buyers—Offerings Light—Crude Steadier—Lard Firmer—Compound and Oil Trade Quiet.

Cotton oil futures on the New York Produce Exchange, after showing losses of 78 to 101 points from the highs of the season at the close of March, recovered 35 to 40 points from the lows of the downward movement this week, with evidence of a completion of liquidation, aggressive commission house buying, and noticeably lighter offerings. Buying by refiners' brokers was very effective at times, and short covering uncovered stop-loss orders, helping the advance.

The volume of trade was somewhat smaller than that of late, but the readiness with which values responded to buying power tended to bring about a more bullish feeling and the expectations of a very favorable March government report, with a disposition here to raise ideas on March consumption to 225,000 or 250,000 bbls., was a factor of no little importance.

Some Expect Oil Price Over Lards.

The rally in the market was started by a somewhat better feeling in lard prices

at the west, but it was noticeable that oil values come back more readily than did lard, with the result that May oil at one time was equal to about forty points over May lard, while July oil averaged 15 to 25 points over July lard. There are those in the trade who are expecting oil values to go anywhere from a half to a cent a pound over lard, and notwithstanding the large open spread between the two commodities, the spreading operations have not been profitable as yet, bringing about a condition somewhat similar to that of a year ago, when cotton oil went to a large premium.

There was nothing startling in the news to account for the bulge, excepting possibly renewed confidence on the part of the leading longs, together with lighter hog receipts than the previous week, and rather general expectations that the hog movement would fall off, from this time forward, owing to increased pressure of farm work. However, hog receipts this week have averaged considerably above those of the same week last year, but nevertheless, hog values are exceptionally well maintained, and considerable attention was given the disappointingly

small increase—2,266,000 lbs.—in the Chicago monthly lard stock statement, lard supplies on April 1, totaling 13,495,000 lbs., against 33,714,000 at the same time last year.

The lard stocks have not accumulated as the bearish element had anticipated, but confidence was noted in the possibilities of the stocks increasing decidedly this month, as cash lard trade was generally reported as small, although some fresh export business was confirmed, and lard shipments last week totaled over forty million pounds.

Crude Markets Steady But Light.

The crude markets were steadier, but trade was light, and the market more or less nominal, with some sales in the southeast at 10¼ and the market there quoted at 10¼ @ 10½c, the Valley 10¼ @ 10½c, and Texas 10½c asked. Little or no attention is being given the crude market as remaining supplies are small, and said to be strongly held.

Cash business was daily reported as slow to fair, in both oil and compound, the latter feeling the relative cheapness of lard, but the larger refiners reported deliveries of oil against old sales as large,

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and compound very liberal, indicating good distribution into consumptive channels, and tending to confirm the expectations of a favorable government report. Compound was firm at 13½@13¾c in carlots, whereas prime western lard, New York, was 12.10@12.20c, middle western around 12c, and city lard 11¾c.

Southern weather conditions were reported as unfavorable for planting cotton, with temperatures rather low, and heavy rainfall at times, but little or no uneasiness is noticeable as yet. Tallow was steadier at nine cents sales New York for extra, while stearine, after selling at 10¾c, was 11c asked.

The weekly weather report summary, said: "The soil and weather conditions were generally favorable for the preparation of land for cotton in the more Northern cotton growing districts, particularly in Oklahoma, most of Arkansas and Tennessee. Farm work made fair to good progress in North Carolina although it was still backward. Weather was generally unfavorable for cotton in the Central and West Gulf coast sections where it was abnormally cool and frequent rains delayed farm work. Considerable cotton had been replanted in Southern Georgia and not much planting had been done in Mississippi. Early cotton was injured in Louisiana and that in Texas was reported in poor to fair condition. The weather was favorable in the cotton districts of Arizona where the crop was coming up nicely and some cotton was planted in Southern New Mexico."

COTTONSEED OIL.—Market transactions.

Thursday, March 29, 1923.

Spot	Sales.	Range.	High.	Low.	Bid.	Asked.	Closing.
Apr.	300	1150	1150	1145	a	1145	a
May	5700	1160	1146	1152	a	1153	a
June	500	1155	1155	1155	a	1160	a
July	14200	1169	1153	1160	a	1161	a
Aug.	400	1159	1157	1159	a	1161	a
Sept.	11200	1161	1149	1157	a	1158	a
Oct.	1600	1051	1039	1042	a	1049	a
Nov.					a	945	a

Total sales, including switches, 35,100.
Prime Crude S. E., 1025c sales.

Friday, March 30, 1923.

Holiday.

Saturday, March 31, 1923.

Spot	Sales.	Range.	High.	Low.	Bid.	Asked.	Closing.
Apr.					a	1100	a
Apr.					a	1120	a

May	2600	1154	1137	1138	a	1139	a
June					a	1139	a
July	4400	1156	1145	1145	a	1146	a
Aug.	1000	1147	1146	1144	a	1146	a
Sept.	1900	1152	1141	1140	a	1142	a
Oct.	500	1035	1029	1026	a	1030	a
Nov.					a	900	a

Total sales, including switches, 10,400.
Prime Crude S. E., 1025c asked.

Monday, April 2, 1923.

Spot	Sales.	Range.	High.	Low.	Bid.	Asked.	Closing.
Apr.					a	1130	a
May	2700	1147	1136	1145	a	1147	a
June					a	1145	a
July	10300	1151	1142	1149	a	1151	a
Aug.	1300	1150	1143	1148	a	1150	a
Sept.	800	1147	1140	1146	a	1148	a
Oct.	1200	1040	1028	1037	a	1041	a
Nov.	200	940	940	940	a	950	a

Total sales, including switches, 16,500.
Prime Crude S. E., 1012½c nominal.

Tuesday, April 3, 1923.

Spot	Sales.	Range.	High.	Low.	Bid.	Asked.	Closing.
Apr.					a	1150	a
May	2000	1165	1151	1160	a	1164	a
June					a	1160	a
July	8100	1172	1155	1164	a	1166	a
Aug.	500	1165	1155	1162	a	1164	a
Sept.	4200	1166	1153	1160	a	1161	a
Oct.	4000	1067	1040	1055	a	1057	a
Nov.	700	965	955	961	a	965	a

Total sales, including switches, 20,700.
Prime Crude S. E., 1025c sales.

Wednesday, April 4, 1923.

Spot	Sales.	Range.	High.	Low.	Bid.	Asked.	Closing.
Apr.					a	1175	a
May					a	1170	a
June	700	1175	1170	1169	a	1172	a
July					a	1170	a
Aug.	4300	1180	1175	1175	a	1177	a
Sept.	500	1180	1177	1174	a	1176	a
Oct.	2900	1175	1168	1169	a	1171	a
Nov.	1100	1070	1065	1065	a	1068	a
Nov.	600	978	973	972	a	975	a

Total sales, including switches, 10,500.
Prime Crude S. E., 1025c-1050.

Thursday, April 5, 1923.

Spot	Sales.	Range.	High.	Low.	Bid.	Asked.	Closing.
Apr.					a	1175	a
May					a	1170	a
June					a	1175	a
July					a	1175	a
Aug.					a	1175	a
Sept.					a	1175	a
Oct.					a	1175	a
Nov.					a	1175	a

*Bid.

SEE PAGE 43 FOR LATER MARKETS.

COCOANUT OIL.—A steady to firm tone featured the market, with trade moderately active, a firm market for copra continuing a feature, while a heavier tone in cake made for a holding tendency on the part of oil producers. At New York Ceylon type in barrels was quoted at 10½@10¾c, tanks, coast, 9@9¼c; Cochiti type, barrels, New York, 10½@10¾c; tanks, 9¾c; edible, bbls., New York, 11@11¼c.

SOYA BEAN OIL.—The past week or ten days has seen more activity in this market, with a liberal trade on the coast in April oil, and a moderate trade in the east for deferred shipment with butter manufacturers and paint interests reported as buyers. Offerings were lighter, and the market steadier. Oriental oil in bulk, April-May, was reported to have sold at 7.65c, c. i. f. New York, and 7.55c asked for June-July. At New York crude in barrels was quoted at twelve cents, blown 12½@13c and Pacific coast tanks 10½@10¾c.

PEANUT OIL.—Limited supplies continue to feature this market, and buyers and sellers remain apart in their ideas and with little or no nearby oil available, there was little feature to the market. Domestic crude oil was quoted at 13@13½c, f. o. b. mills in tanks, and refined barrels, New York, 17½c.

CORN OIL.—The undertone here was barely steady with a good deal of attention being directed toward cottonseed oil, and with demand more moderate. Crude in barrels, New York, was quoted at 12½c, tanks Chicago 10½c, refined, barrels, New York, 13¼@13½c, and in cases, \$12.13.

PALM OIL.—Demand for Lagos from tin-plate interests resulted in a more or less steady tone in this market, with offerings well held, offsetting the tallow situation. Soapers absorbed fair amounts of tallow, bringing about a firmer undertone. At New York Lagos spot was quoted at 8¾c, shipment 8¾c, Niger casks, spot, 8½c, shipment 8¾c.

PALM KERNEL OIL.—Steady foreign markets resulted in a more or less steady position here, though interest was quiet, and prices were quoted at 9¾@10c in casks.

COTTONSEED OIL.—Demand quiet to fair; future market irregular but cash prices firm; P. S. Y. spot, barrels, New York, 12½c; bleachable tanks, f. o. b. mills, 10¾@11c; southeast crude, 10¾c sales; Valley, 10¾c nominal; Texas, 10¾c nominal.

The Procter & Gamble Co.

Refiners of all Grades of

COTTONSEED OIL

Boreas, Prime Winter Yellow
Venus, Prime Summer White
Jersey Butter Oil
Aurora, Prime Summer Yellow

Puritan, Winter Pressed Salad Oil
White Clover Cooking Oil
Marigold Cooking Oil
Sterling, Prime Summer Yellow

Refineries: IVORYDALE, O.
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KANSAS CITY, KAN.
MACON, GA.
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29 BROADWAY, N. Y. CITY

BROKERS EXCLUSIVELY

VEGETABLE OILS

In Barrels or Tanks

Hardened Edible Cocoanut Oil

COTTON OIL FUTURES

On the New York Produce Exchange

FEBRUARY SWEDISH OILS.

An important factor affecting the vegetable oil trade is the unsettled politico-economic condition in Central Europe, which appears to have brought about, to a certain extent at least, a shift in the market from which Sweden obtains its raw materials for vegetable oils, especially in that some of the edible fats and oils and raw materials which came from Germany appear to be imported from Holland.

Considerable shipments of copra are still being shipped from Hamburg, but Holland appears to be becoming more and more a supplier of raw products, particularly for the margarine factories in Sweden. The price of vegetable oils has shown a gradual upward tendency and rose on an average of 5 ore kilogram. A prominent importer of vegetable oils estimated that the total production of margarine in Sweden in 1922 was 16,000,000 kilos and it is said that the production and consumption of margarine tended toward pre-war figures which averaged about 25,000,000 kilograms annually. The importations of copra during the month of January were practically four times those for the same month of 1922, according to a report to the U. S. Department of Commerce. The importations of vegetable oils showed a decided decrease.

CUBAN SOAP MANUFACTURE.

About 60 per cent of the soap manufactured in Cuba consists of the yellow laundry variety. Tallow used in the manufacture of this soap is bought locally or imported from the Argentine, or from the United States—the most coming from the latter country. Grease used in the manufacture of this soap is imported in tank cars from various parts of the United States, via the Florida East Coast all rail route, and to a lesser extent is purchased from domestic slaughter houses.

About 10 per cent of the soap manufactured in Cuba consists of perfumed toilet soap manufactured from the best grades of imported oils and fats. Practically all of the material which enters into the manufacture of this grade of soap has to be imported.

The bulk of the remainder of Cuban manufactured soap consists of the white floating variety which is manufactured principally from cocoanuts, cottonseed and other vegetable oils, practically all of which are imported.

There is a movement on foot to increase the tariff protection on soap, especially on perfumed toilet soaps in solid or liquid form. In view of the 40 per cent tariff preferential in favor of American soaps of this class, it is predicted that such an increase in the duties would effectively stop the importation of French and other European perfumed toilet soaps.

SOUTHERN MARKETS.

New Orleans.

(Special Wire to The National Provisioner.)

New Orleans, La., April 5, 1923.—Prime crude cottonseed oil was steady at 10½ cents, offerings and stocks light. Refined cottonseed oil meal was lower with 7 per cent quoted at \$38.50; 8 per cent, \$41.50. Hulls were higher with loose at \$15.00 and sacked at \$18.00, all f. o. b. interior points.

Memphis.

(Special Wire to The National Provisioner.)

Memphis, Tenn., Apr. 5, 1923.—Crude cottonseed oil was firm at 10¼c bid in the valley, but there was no trading. Forty-one protein meal was quoted at \$41.00; loose hulls at \$16.00 Memphis. Most mills this territory are closed down and sold out.

JANUARY MARGARIN STATISTICS.

The following are the figures of actual production of margarin in the United States, for January 1923, with compari-

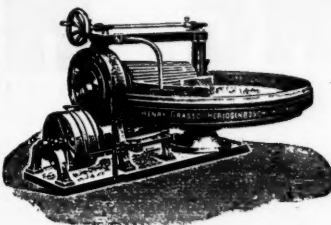
THE AMERICAN COTTON OIL COMPANY

65 Broadway, New York

Cable Address "AMCOTOIL"

Union Pure Salad Oil	Refined Peanut Oil	Cotton Linters
Union Choice Butter Oil	Refined Corn Oil	Wilcox Lard
I. X. L. Cooking Oil	Cottonseed Cake	Boar's Head and Cottolene
Refined Cocoanut Oil	Cottonseed Meal	FAIRBANK'S Shortenings

FAIRBANK'S Soaps and GOLD DUST Washing Powder



GRASSO'S

"Original Holland" Margarine Machinery

Sold in America only by the

A. H. BARBER CREAMERY SUPPLY CO.

Grasso's Famous Table Worker 316 W. Austin Ave. CHICAGO, ILL.

sons, as reported by margarin manufacturers to the U. S. Department of Agriculture.

The reports of the Bureau of Internal Revenue are estimates based on the value of stamps sold during the month.

UNCOLORED MARGARIN.

	January, 1922.	January, 1923.
	Pounds.	Pounds.
Exclusively animal.....		22,780
Exclusively vegetable.....	7,010,293	9,392,532
Animal and vegetable.....	8,524,289	10,494,363

COLORED MARGARIN.

Exclusively animal.....		224,960
Exclusively vegetable.....	138,485	652,800
Animal and vegetable.....	461,711	
Total	16,434,778	20,777,425

INTERSTATE COMMERCE CASES.

Complaints made recently to the Interstate Commerce Commission and decisions rendered by the commission in cases of interest to meat packers are reported as follows:

Rates on Lard Substitutes.—Examiner F. W. McM. Woodrow has proposed dismissal of the complaint in No. 13969, Southern Cotton Oil Company vs. Director-General, as agent, holding that class rates on lard substitute from Bayonne, N. J., to Boston, Mass., were applicable and not unreasonable. The fifth-class rate of 25½ cents was paid on all shipments except three which were undercharged 3 cents, the examiner said. The shipments involved—23 carloads—moved in the period between March 28, 1919, and February 9, 1920.

Rates on Lard Substitutes.—An award of reparation has been recommended by Examiner T. John Butler in a tentative report on No. 14199, Armour & Company vs. Director-General, as agent, on a finding that a class B rate of 56.5 cents per 100 pounds charged on carload and less-than-carload shipments of lard substitutes, shipped from Chattanooga, Tenn., to Charlottesville, Va.,

was unreasonable to the extent that it exceeded 31.5 cents on the carload shipment and 34 cents on the less-than-carload shipment. At the time the shipments moved there were published commodity rates of 31.5 cents, carloads, and 34 cents, less than carloads, from Chattanooga to Washington, D. C., a distance of 715 miles, and to Alexandria, Va., 707 miles. Charlottesville is directly intermediate to Washington and Alexandria, being 603 miles from Chattanooga. The defendant contended the rates to Washington and Alexandria were paper rates and that there had never been any movement under the published rates to those points.

Lard Substitute Reparation.—A finding of unreasonableness and an award of reparation have been recommended by Examiner I. L. Koch, in a report on No. 14396, Interstate Cotton Oil Refining Company vs. St. Louis Southwestern et al., as to the rate of 54 cents charged on lard substitutes, salad and cooking oils, in carloads, between August 26, 1920, and June 28, 1922, from Sherman, Tex., to Shreveport, La., which, he said, was unreasonable to the extent it exceeded 44 cents as claimed by the complaining shipper. The examiner said the Commission, in Texas Refining Co. vs. A. & V., 32 I. C. C. 192, had found that lard substitute should take the same rates as packinghouse products, from Texas points of origin, and that that decision should control in this case, because no good reason appeared for discarding the packinghouse product scale rates on ship and goats, and 20 cents on horses and ments from Sherman to Shreveport.

Rates on Nitrate of Soda.—Examiner H. W. Johnson has recommended an award of reparation in No. 13881, Armour Fertilizer Works vs. Director-General, as agent, on a proposed finding that a rate of 54 cents per 100 pounds applied on one carload of nitrate of soda, in bags, imported from Chile, shipped on November 14, 1919, from New Orleans to Sturgeon Bay, Wis., was unjust and unreasonable to the extent that it exceeded 40.5 cents, the aggregate of the intermediate rates.

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for Fat and Oil Filtration

Improves clarity, secures better keeping qualities and reduces operating costs. Write for complete information given in Bulletin KK-40.

Celite Products Company

New York, 11 Broadway Chicago, 53 W. Jackson St. San Francisco, Market St. Celite Products Ltd., Montreal, Que., Canada

THE CASING HOUSE

Supply and Demand

In a short time the demand
for Beef Bladders will exceed
the supply. Reduce cost of
production by buying now.

BERTH. LEVI & Co., Inc.

ESTABLISHED 1882

NEW YORK
LONDON

CHICAGO
WELLINGTON, N. Z.

THE WEEK'S CLOSING MARKETS

FRIDAY'S CLOSINGS.

Provisions.

Hog products were dull and barely steady during the latter part of the week under hedging by packers, continued liberal hog receipts, limited cash trade, easy foreign markets and limited outside speculative interest.

The hog movement keeps up larger than expected. A western estimate indicated 10 per cent more brood sows in the country on April 1, 1923, than a year ago.

Cottonseed Oil.

Cottonseed oil was moderately active with undertone strong, prices advancing 47 to 58 from last Saturday's lows, reacting about 10 from the week's highs under realizing and letup in demand from shorts selling on easiness lard. Cash trade was moderate. Cotton planting weather is better. National ginners have estimated the cotton acreage at an increase of from 10 to 12 per cent, possibly 15 with favorable weather. May oil sold 50 over May lard. Southeast crude cottonseed oil was 10 1/2 to 10 3/4 cents and Valley 10 1/4 to 10 1/2 cents. Texas quotation was 10 1/4 c nominal.

Quotations on cottonseed oil at Friday noon were: May, \$11.75@11.81; July, \$11.77@11.79; August, \$11.75@11.78; September, \$11.65@11.70; October, \$10.60@10.65; November, \$9.67@9.72.

Tallow.

Extra, 9c.

Oleo Oil and Stearine.

11c; extra oleo oil, 14c.

FRIDAY'S GENERAL MARKETS.

New York, April 6, 1923.—Spot lard at New York, prime western, \$12.10@12.20. Middle West, \$11.90@12.00; city steam, \$11.87; refined, continent, \$13.00; South American, \$13.25; Brazil, kegs, \$14.25; compound, \$13.75.

Liverpool Provision Markets.

Liverpool, April 6, 1923.—(By cable.)—Quotations today: Shoulders, square, 58s (\$13.57); shoulders, picnics, 55s (\$12.98); hams, long cut, 87c (\$20.35); hams, American cut, 85c (\$19.89); bacon, Cumberland cut, 71s (\$16.76); bacon, short backs, 70s (\$16.38); bacon, Wiltshire, 65s (\$15.21); bellies, clear, 97s (\$22.91); Australian tallow, 41s 9d to 42s (\$9.73 to 9.79); spot lard, 63s 5d (\$14.78).

Hull Oil Market.

Hull, England, April 6, 1923.—(By cable.)—Refined cottonseed oil, 43s 5d; crude cottonseed oil, 39s (\$10.11-9.09).

ARGENTINE BEEF EXPORTS.

Cable reports of Argentine exports of beef for the week up to April 6, 1923, show exports from that country were as follows: To England, 129,721 quarters; to the Continent, 42,604 quarters; to other ports, none. Exports for the previous week were as follows: To England, 130,541 quarters; to the Continent, 6,372 quarters; to other ports, none.

MARCH STOCKS OF PROVISIONS.

Stocks of provisions at leading centers at the end of March, 1923, with comparisons, are officially reported as follows:

PORK, BBLs.			
	March 31, 1923.	Feb. 28, 1923.	March 31, 1922.
Chicago	25,575	22,946	28,504
Kansas City	5,213	5,774	2,183
Omaha	5,448	4,615	2,202
St. Joseph			
Milwaukee	5,963	6,020	2,235
Total pork, bbls.	42,199	39,355	35,124
LARD, LBS.			
Chicago	13,495,496	11,228,711	34,713,563
Kansas City	3,026,001	1,501,640	1,654,795
Omaha	3,056,527	2,651,410	1,470,577
St. Joseph			
Milwaukee	1,235,090	1,110,560	1,176,650
Total lard, lbs.	21,413,714	16,492,281	39,014,585
CUT MEATS, LBS.			
Chicago	124,877,630	114,753,692	86,828,538
Kansas City	60,987,800	59,512,600	41,243,600
Omaha	41,456,032	37,495,094	25,039,854
St. Joseph			
Milwaukee	18,347,000	18,779,000	13,400,000
Total cut meats, lbs.	251,668,492	220,540,986	156,520,992

CANADIAN LIVESTOCK PRICES.

Summary of top prices for livestock at leading Canadian centers for the week ended March 28, 1923, with comparisons, are reported by the Markets Intelligence Division of the Dominion Department of Agriculture as follows:

STEERS.			
	Week ended Mar. 28, 1923.	Same week, 1922.	Week ended Mar. 22, 1922.
Toronto	\$7.75	\$8.35	\$8.40
Montreal (W.)	7.50	8.15	7.50
Montreal (E.)	7.50	8.15	7.50
Winnipeg	6.60	7.25	6.25
Calgary	6.25	5.75	6.15
Edmonton	6.50	6.00	6.00
CALVES.			
	Week ended Mar. 28, 1923.	Same week, 1922.	Week ended Mar. 22, 1922.
Toronto	\$9.00	7.25	10.00
Montreal (W.)	9.00	7.25	10.00
Montreal (E.)	9.00	7.25	10.00
Winnipeg	10.00	11.00	10.00
Calgary	5.00	7.00	5.00
Edmonton	9.00	7.00	8.00
HOGS.			
	Week ended Mar. 28, 1923.	Same week, 1922.	Week ended Mar. 22, 1922.
Toronto	\$11.82	\$13.75	\$11.00
Montreal (W.)	11.25	15.00	10.50
Montreal (E.)	11.25	15.00	10.50
Winnipeg	10.45	12.00	9.90
Calgary	9.73	11.00	8.91
Edmonton	10.45	11.00	9.90
LAMBS.			
	Week ended Mar. 28, 1923.	Same week, 1922.	Week ended Mar. 22, 1922.
Toronto	\$15.50	\$16.00	\$16.00
Montreal (W.)	11.50	11.00	11.50
Montreal (E.)	11.50	11.00	11.50
Winnipeg	12.50	12.00	11.50
Calgary	11.50	12.00	11.50
Edmonton	10.50	10.00	11.00

MEAT SUPPLIES AT NEW YORK.

Receipts of western dressed meats and local slaughter under federal inspection for New York City, N. Y., are officially reported for the week ending March 31, 1923, with comparisons, as follows:

	Week ending Mar. 31, 1923.	Previous week, 1922.	Cor. week, 1922.
Western dressed meats:			
Steers, carcasses	6,063	6,302	7,138
Cows, carcasses	800	1,044	495
Bulls, carcasses	1,117	257	175
Veal, carcasses	9,644	9,212	11,793
Hogs and pigs	2,210	1,838	
Lambs, carcasses	22,581	23,354	23,325
Mutton, carcasses	5,640	7,027	5,287
Beef cuts, lbs.	312,808	190,512	
Pork cuts, lbs.	1,400,286	1,438,912	911,424
Local slaughter, Federal inspection:			
Cattle	10,554	9,723	9,544
Calves	10,942		
Hogs	56,316	54,150	45,372
Sheep	33,963	33,084	34,386

MEAT SUPPLIES AT PHILADELPHIA.

Receipts of western dressed meats and local slaughter under city and federal inspection at Philadelphia, Pa., are officially reported as follows for the week ending March 31, 1923, with comparisons:

	Week ending Mar. 31, 1923.	Previous week, 1922.	Cor. week, 1922.
Western dressed meats:			
Steers, carcasses	2,302	2,474	2,374
Cows, carcasses	387	480	513
Bulls, carcasses	13	120	107
Veal, carcasses	946	3,368	2,163
Lambs, carcasses	7,517	6,623	6,281
Mutton, carcasses	1,377	1,557	1,486
Pork, lbs.	483,002	378,820	306,727
Local slaughters:			
Cattle	2,014	2,401	2,418
Calves	1,773	2,065	2,562
Hogs	20,359	22,635	17,002
Sheep	5,442	4,586	5,637

MEAT SUPPLIES AT BOSTON.

Receipts of western dressed meats and slaughter under federal and city inspection at Boston, Mass., are officially reported as follows for the week ending March 31, 1923, with comparisons:

	Week ending Mar. 31, 1923.	Previous week, 1922.	Cor. week, 1922.
Western dressed meats:			
Steers, carcasses	2,232	2,631	2,872
Cows, carcasses	890	1,761	1,395
Bulls, carcasses	19	79	66
Veal, carcasses	736	926	1,473
Lamb, carcasses	10,210	12,990	11,431
Mutton, carcasses	1,152	930	433
Pork, lbs.	150,194	222,594	134,142
Local slaughters:			
Cattle	1,482	1,284	1,361
Calves	3,231	3,015	5,409
Hogs, carcasses	21,852	16,010	9,493
Sheep, carcasses	3,234	3,440	4,175

RECEIPTS AT CENTERS.

SATURDAY, MARCH 31, 1923.

	Cattle.	Hogs.	Sheep.
Chicago	500	8,000	3,500
Kansas City	200	4,500	2,000
Omaha	800	14,000	500
St. Louis	300	6,000	1,300
St. Joseph	200	4,000	500
Sioux City	900	15,500	200
St. Paul	200	11,000	100
Oklahoma City	100	500	100
Fort Worth	200	600	100
Milwaukee	100	4,500	100
Denver	400	200	1,500
Louisville	100	1,500	100
Wichita	300	600	100
Indianapolis	200	3,000	100
Pittsburgh	100	1,000	1,000
Cincinnati	400	4,500	100
Buffalo	200	3,000	100
Cleveland	100	2,000	500
Nashville	100	1,300	100
Toronto	700	400	200

MONDAY, APRIL 2, 1923.

	Cattle.	Hogs.	Sheep.
Chicago	23,000	54,000	24,000
Kansas City	10,000	22,000	10,000
Omaha	9,000	14,000	13,000
St. Louis	3,300	18,000	1,000
St. Joseph	2,200	11,000	9,000
Sioux City	2,000	7,000	600
St. Paul	2,500	8,000	400
Oklahoma City	1,000	2,000	
Fort Worth	1,200	2,500	200
Milwaukee	200	800	100
Denver	1,400	500	8,300
Louisville	800	2,000	200
Wichita	2,000	1,500	100
Indianapolis	1,400	5,000	100
Pittsburgh	1,500	8,000	4,000
Cincinnati	1,100	2,000	
Buffalo	2,000	13,000	8,400
Cleveland	700	6,000	400
Nashville	600	2,200	
Toronto	2,100	2,000	100

TUESDAY, APRIL 3, 1923.

	Cattle.	Hogs.	Sheep.
Chicago	10,000	24,000	20,000
Kansas City	9,000	18,000	6,000
Omaha	9,000	17,000	8,000
St. Louis	3,500	13,000	600
St. Joseph	3,300	7,000	3,000
Sioux City	3,000	14,000	300
St. Paul	2,200	12,000	100
Oklahoma City	1,000	1,500	
Fort Worth	1,500	3,000	
Milwaukee	600	2,500	200
Denver	900	4,800	8,600
Louisville	200	2,400	200
Wichita	400	1,200	100
Indianapolis	200	9,000	100
Pittsburgh	100	1,500	500
Cincinnati	500	3,000	400
Buffalo	200	3,000	1,500
Cleveland	200	2,500	1,000
Nashville	100	1,600	
Toronto	1,100	1,400	

WEDNESDAY, APRIL 4, 1923.

	Cattle.	Hogs.	Sheep.
Chicago	7,000	20,000	14,000
Kansas City	5,000	14,000	5,000
Omaha	6,500	12,000	8,500
St. Louis	2,500	16,500	500
St. Joseph	2,700	8,500	3,000
Sioux City	2,200	14,000	200
St. Paul	2,100	16,000	1,300
Oklahoma City	800	2,500	
Fort Worth	1,000	3,000	
Milwaukee	200	1,000	100
Denver	700	900	2,700
Louisville	200	1,600	100
Wichita	300	1,100	
Indianapolis	1,000	8,000	100
Pittsburgh	100	2,000	500
Cincinnati	500	4,200	300
Buffalo	200	3,500	1,000
Cleveland	300	4,000	800
Nashville	100	1,800	
Toronto	1,600	2,400	400

THURSDAY, APRIL 5, 1923.

	Cattle.	Hogs.	Sheep.
Chicago	9,000	25,000	15,000
Kansas City	3,000	8,000	2,000
Omaha	4,300	19,000	7,000
St. Louis	1,500	13,500	500
St. Joseph	1,500	6,000	3,000
Sioux City	1,800	12,000	100
St. Paul	1,700	9,000	100
Oklahoma City	400	1,500	
Fort Worth	1,200	2,000	200
Milwaukee	500	1,500	200
Denver	700	2,200	4,600
Indianapolis	600	6,000	100
Pittsburgh	100	2,300	1,000
Cincinnati	900	5,200	100
Buffalo		1,000	800

FRIDAY, APRIL 6, 1923.

	Cattle.	Hogs.	Sheep.
Chicago	7,000	38,000	10,000
Kansas City	1,500	7,000	2,000
Omaha	3,500	14,500	7,000
St. Louis	1,200	14,000	200
St. Joseph	1,000	8,000	4,000
Sioux City	2,000	16,000	500
St. Paul	1,100	9,500	300
Oklahoma City	600	2,000	
Fort Worth	1,000	2,000	300
Milwaukee	200	1,000	100
Denver	200	200	6,400
Indianapolis	800	5,000	100
Pittsburgh	100	3,500	1,500
Cincinnati	500	5,000	2,100
Buffalo	200	6,400	7,200

NEW YORK LIVESTOCK.

The following are the receipts for week ending Saturday, March 31, 1923:

	Cattle.	Calves.	Hogs.	Sheep.
Jersey City	3,300	9,746	11,523	13,050
New York	1,094	4,116	23,006	26
Central Union	3,518	1,784		16,505
Total for week	8,912	15,646	34,529	29,581
Previous week	8,924	13,694	36,495	39,189
Two weeks ago	7,909	13,535	34,300	30,157

Proper Buying of Livestock Is the First Source of Profit

ORDER BUYERS
Bob Sundheimer & Co.
National Stock Yards, Ill.
Cattle Calves Hogs
Sheep Lambs

Local and Long Distance Phones:
Bell, East 814 Kinloch, St. Clair 886-R
References:
National Stock Yards, National Bank,
and our customers

We buy
Cattle, Calves, Sheep & Hogs
on commission
McMurray & Johnston
LIVESTOCK PURCHASING AGENTS

Indianapolis, Ind.

Established 1900

Cleveland, Ohio

Oldest Hog Buying Firm
on Indianapolis Market

C. F. Kramer Co.
Established 1890

U.S. Yards, Indianapolis, Ind.

Buyers of Hogs
on Commission

Reference: Live Stock Exchange Bank

Live Stock KENNETT Buyers Only

P. C. KENNETT & SON
Bourbon Stock Yards, Louisville, Ky.

P. C. KENNETT & SON
Union Stock Yards, Nashville, Tenn.

P. C. KENNETT & SON
Union Stock Yards, Montgomery, Ala.

KENNETT, COLINA & CO.
Union Stock Yards, Cincinnati, Ohio

KENNETT, SPARKS & CO.
National Stock Yards, E. St. Louis, Ill.
KENNETT, MURRAY & DARNELL
Union Stock Yards, Indianapolis, Ind.

KENNETT, MURRAY & CO.
Union Stock Yards, Lafayette, Ind.
KENNETT, MURRAY & COLINA
M. C. Stock Yards, Detroit, Mich.

J. W. MURPHY
OMAHA

Buyer of Hogs
on Order

SPECIAL ATTENTION GIVEN
YOU WILL BE PLEASED

6 COMPETENT BUYERS
7 ASSISTANTS

We Handle Hogs Only
Utility and Cross Cyphar

Reference:—Any Meat Packer

Hog Buyers
Exclusively
WALKER-WATKINS
National Stock Yards, Ill.

—References—
National Stock Yards National Bank
Drovers National Bank

E. E. JOHNSTON
Established 35 Years
Hog Buyers
Exclusively
Live Stock Exchange
East Buffalo, N. Y.

JOHN HARVEY & CO.

Order Buyers
Cattle Exclusively

OMAHA, NEB.
SIOUX CITY, Iowa

References:
Live Stock National Bank, Omaha
" " " " Sioux City
Utility Cyphar

DENVER REPRESENTATIVES,
A. W. Hand & Co.

Coy & Delmore
National Stock Yards, Ill.
Successors to Mannion & Coy
Live Stock
Purchasing Agents
All kinds of Live Stock
30 Years Experience in Order Trade

REFERENCES:
National Stock Yards Natl. Bank or any
commission firm established at this point.

Order Buyers
of
Cattle Calves
Hogs Lambs
Henry Knight & Son
Bourbon Stock Yards
Louisville, Ky.
Reference: Dun & Bradstreet

The National Provisioner
Keeps you posted on
The Men and the Markets

FOREIGN EXCHANGE SITUATION.

Editor's Note—This statement is prepared weekly by the Institute of American Meat Packers from information obtained from The Merchants Loan & Trust Company, Chicago, Ill.

Country.	Monetary unit.	Par value in U. S. money.	Value on April 5.
Austria—Krone		\$.203	.0000145
Belgium—Franc		.193	.0554
Czecho-Slovakia—Krone		*	.0298
Denmark—Krone		.268	.1909
Finland—Finmark		.193	.0275
France—Franc		.193	.0837
Germany—Mark		.238	.0000475
Great Britain—Pound		4.866	4.67
Greece—Drachma		.193	.0120
Italy—Lira		.193	.0499
Japan—Yen		.498	.4875
Jugo-Slavia—Krone		*
Netherlands—Florin		.402	.3931
Norway—Krone		.268	.1809
Poland—Polish mark.		*	.000024
Roumania—Leu		.193	.49
Russia—Rouble		.515	.....
Servia—Dinar		.193	.0100
Spain—Peseta		.193	.1532
Sweden—Krona		.268	.2060
Switzerland—Franc		.193	.1842
Turkey—Turkish pound.		4.40	.....

*No par of exchange has been determined upon and will probably not be fixed until after the Allies have decided upon all of the requirements from those countries.

LIVE STOCK MARKETS

CHICAGO.

(Reported by the U. S. Bureau of Agricultural Economics.)

Union Stock Yards, Chicago, April 5.

With liberal receipts of 23,000 cattle estimated for the local run on Monday, beef steers and yearlings met price declines of 15 to 25c, choice 1,200 to 1,400-lb. steers topping at \$10.00 on that day. Butcher she stock showed little price fluctuation while bologna bulls were weak to 15c lower and veal calves around steady.

Under moderate receipts during the following days of this week, all price declines have been erased and in the case of better grades of matured beef steers and best weight yearlings, gains of 10 to 15 and even 25c are noted on Thursday's session, while for the week veal calves show rather spectacular advances of 50c to \$1.00 and in instances much more especially on plainer light kinds which were selling at \$6.50 to \$8.00 on last week's close, this being the low spot for the season to date. Stockers and feeders during the week to date show very little price fluctuation with a tendency toward a lower market as Thursday's session closed.

All classes and grades of hogs show price advances with butchers mostly 35 to 45c higher, light hogs 25 to 30c higher, packing sows around 25c higher, pigs and light lights a little better than steady.

Fat lambs were on the decline practically all week with old crop lambs selling 25 to 40c lower for the week and fed yearling wethers showing a sympathetic decline. The extreme top for old crop wool lambs during the week was \$14.90. Aged stock under very moderate supply sold around steady with spots strong.

Ten market totals of cattle for the week at 154,000 shows little change from same period last week but about 25,000 over a like period a year ago, while receipts of hogs at 509,000 up to date this week are about 100,000 short of the first four days of last week and 175,000 in excess of arrivals for similar period a year ago. Sheep receipts for the ten markets for this week stand at 183,000 against 194,000 last week and 145,000 a year ago. Locally receipts show only a moderate fluctuation for cattle and sheep while hogs decreased over 30,000.

During later sessions of the week quality of beef steers showed improvement and shipping orders were rather insistent for the matured offerings paying a top of \$10.40 for 1,340-lb. averages and \$10.35 for 1,450-lb. averages, numerous loads of matured steers having had four to six months' acquaintance with corn going to this outlet at \$9.60 to \$10.25. Weighty well finished yearlings were in demand while under liberal offerings light and plainer kinds of yearlings both steers and heifers met a draggy outlet as the week closed and prices if changed at all were on the downward trend. Steers with sufficient quality and not fat selling around \$7.50 to \$8.25 usually went to finishers rather than to killers, however, the closing session witnessed liberal supplies of these in dealers' hands with a tendency to lower prices if a week end cleanup was to be effected.

Butcher she stock showed little fluctuation through the week with a tendency on the part of shippers to take well finished fat cows and heifers at stronger prices. Bologna bulls after a decline of 10 to 15c on Monday rallied and held their own until Thursday when lack of shipping orders

forced prices down 10 to 15c, bulk of meaty bolognas on that day clearing at \$4.85 to \$5.10. Beef bulls while scarce, met a draggy outlet, heavy plain kinds usually selling within a spread of bologna prices.

Veal calves after closing last week at the low time of the session met rather spectacular price gains until Thursday, plain light and handyweight kinds such as sold mostly at \$6.50 to \$8.00 last Friday cleared at \$8.50 to \$9.50. Packers absorbed the bulk of good and choice 100 to 120-lb. vealers Thursday at \$9.25 to \$9.75; shippers selecting a few up to \$10.50.

Bulk of fat woolled lambs sold this week at \$14.00 to \$14.65 with heavies largely at \$12.50 to \$13.00, while the bulk of clipped kinds made \$11.25 to \$11.90 with heavies sorted out at \$9.75 to \$10.00. Four loads of California spring lambs made \$15.00 with throwouts at \$13.00. A few native springs arrived and sold at \$20.00 to \$25.00, odd bunches reaching \$35.00 to the Greek trade. Choice 104-lb. clipped ewes made \$8.25, while woolled ewes topped at \$9.00. Aged wethers sold up to \$10.00 with fall clipped kinds at \$9.00.

Selling at the high time for the week to date, bulk of 160 to 230-lb. hogs sold Thursday at \$8.55 to \$8.70 with bulk of 225 to 325-lb. butchers at \$8.40 to \$8.60; packing sows brought mostly \$7.40 to \$7.60 and desirable 90 to 130-lb. pigs found a fairly active outlet at \$7.00 to \$7.60.

KANSAS CITY.

(Special Letter to The National Provisioner.)

Kansas City, April 4.

Live stock prices are slightly higher this week with average quality of the offerings better than last week. The last two days' offerings of steers and handy weight butcher cattle were especially good in quality. Prime yearlings sold up to \$9.60 and heavy steers up to \$9.50, the bulk of the choice steers sold at \$8.75@9.25, with some dogie and plain southwest steers \$6.50@7.50.

Most of the steers are coming from Kansas, Missouri and Nebraska and they have been full fed grain 4 to 5 months. Prime cows are selling at \$7@7.50. Good to choice cows \$6@7 and the fairly good cows \$4.75@5.85. Cannors and cutters are quoted at \$2.75@4. Fat bulls \$3.75@5.50 and veal calves \$7.50@9.25.

Hog prices were steady today with prices higher than Tuesday and slightly lower than the top price of last week. Top price today was \$8.25 and the bulk of the offerings brought \$8@8.20. Extreme heavy hogs sold from \$7.75@8.10. Butcher grades \$8.05@8.25 and light weights \$8.10@8.20. Packing sows sold at \$7.35. Pigs brought \$7.25@7.75.

Choice wool lambs are selling at \$13.75@14.25, clipped lambs \$10.75@11.25 and wool yearlings \$10@13. About 35,000 Arizona spring lambs sold at \$14.50 with a 33 per cent sort to \$12. Native spring lambs brought \$15@15.50. Clipped wethers sold up to \$8.10 and clipped ewes up to \$7.50.

OMAHA.

(Special Letter to The National Provisioner.)

South Omaha, Neb., April 4.

Three days' receipts of cattle this week, 24,000 head, were 10,000 heavier than a year ago and quality of the offerings has noticeably improved. Demand for the attractive grades has also broadened appreciably and values in general are quotably 15@25c higher than a week ago.

Best beef steers and yearlings are sell-

ing around \$8.85@9.50, fair to good grades largely at \$8.25@8.75, and the plainer kinds from \$8 down. Cows and heifers have shown fully as much improvement as the beef steers with best heifers quoted at \$7.50@8.50. Veal calves at \$4.50@9.50, and bulls, stags, etc., at \$4.25@7, show little change, as compared with a week ago.

In spite of continued liberal hog supplies the market has shown a tendency to recover from the recent depression and values are unevenly higher than a week ago, with both packers and shippers buying freely. With 18,500 hogs here today the market was strong to 5c higher. Best light and butcher hogs brought \$8 against \$7.90 last Wednesday and bulk of all the hogs sold at \$7.95@8 against \$7.80@7.90 a week ago.

Not much change has been noted in the market for sheep and lambs and values are generally fully steady with the best time last week. Fat lambs are quoted at \$12.25@14.35, yearlings at \$11.75@13.25 and wethers and ewes at \$7@9.

ST. LOUIS.

(Special Letter to The National Provisioner.)

National Stock Yards, Ill., April 4.

Receipts in live stock, March 29 to April 4, inclusive, are: 13,100 cattle, 81,825 hogs, 7,150 sheep.

Moderate receipts in the cattle yards following the draggy and lower tendency characterizing the previous period has served to make much more active trading and to stimulate prices. The top for the week, made on Tuesday on heavy beeves, is \$9.40, and other sales during the period are reported at \$9@9.25, the most of the steers suitable for beef purposes are only medium in quality and the consequence is the bulk ranges from \$7.50@8.50 with the common kinds \$6.50@7.50. The top for the period on yearling steers is \$9.50, with the heifers selling out of the same drove at \$9, the bulk of all light weight yearlings are selling at \$7@9, with the common light mixed lots ranging from \$5@7. Butcher cows are holding up well, the bulk ranging from \$5.25@6.50, fancy cows up to \$7.75, the practical low end remains around \$4.75.

Hog trading remains on a steady to strong basis. Prices are around 15@25c higher than this time a week ago. While the shipping weight kind still sells to the top of the market, good butcher grades are selling close to it and there is likewise a very good demand for heavy hogs. Today's quotations are: Mixed and butchers, \$8.45@8.60; good heavies, \$8.30@8.45; roughs, \$7.25@7.50; lights, \$8.55@8.65; pigs, \$7.25@8.25; bulk, \$8.45@8.60.

The sheep and lamb market is quiet but current prices indicates a steady tone to the trade. Handy weight ewes are bringing \$8.50@9; heavy weights, \$7@8; choice to prime wool lambs, if light, \$14.50@15; medium weights, \$12.75@14.50; good quality clipped lambs, if not too heavy, are bringing around \$12; heavy shorn lambs brought \$9 in the middle of the week.

ST. JOSEPH.

(Special Letter to The National Provisioner.)

South St. Joseph, Mo., April 3.

Receipts of cattle for the week to date numbered around 5,400, the run consisting largely of beef steers and mixed yearlings. Monday's trade was active and strong, but Tuesday's trade was slow and weak to a shade lower. Best steers sold \$9.45@9.55, but bulk of sales ranged \$8.00@8.85. Mixed

yearlings in load lots ranged \$6.75@8.75, and heifers \$6.00@8.00. Choice cows sold up to \$7.25 and canners down to \$2.50. Bulls are strong to a shade higher, with sales ranging largely \$4.25@6.00, and a few light-weights as high as \$7.50. Calves are steady for the week, choice kinds selling at \$8.00. Stockers and feeders were in light showing and the market ruled firm for the two days. Sales ranged \$6.25@8.00.

Hog receipts for two days this week totaled around 19,000, which was 2,000 less than last week. The market was under pressure Monday, sales being mostly 20@25c lower. Tuesday's trade was slow with prices steady at Monday's average. Best hogs sold at \$8.05 and bulk of sales ranged \$7.95@8.00. The spread in prices continues very narrow, and few sales were made below \$7.85.

Sheep receipts for the week to date totaled around 10,800, and the market on all killing classes is 25c lower. Best lambs sold at \$14.25, and others ranged down to \$13.75. Clipped lambs sold at \$11.25. Ewes sold \$7.25@8.75. Wethers are quoted \$9.00@9.75, and yearlings \$11.50@12.75.

SIoux CITY.

(Special Letter to The National Provisioner.)

Sioux City, Iowa, April 4.

Receipts of cattle have shown a small tendency to increase of late. The market has been a fluctuating one in a variation of around 25 cents per hundred weight, but at this writing is about steady with the finish of last week and the undertone is rather strong. Bulk of supplies are running to beef grades in all stages of corn feeding.

Prime steers, all weights, would sell at around \$9.50 or better, but the best here this week have been a near choice quality at \$9.00@9.25; fair to good grades of corn-fed beefs are selling largely at \$8.00@8.75; warmed-up grades, \$7.00@7.75, with feeders taking some of the \$7.25@7.50 grades; common and thin light steers, \$6.25@7.00; fancy heifers, corn-fed, up to \$8.50, not many above \$7.50, and the bulk of fat cows and heifers at a range of \$6.00@7.00; canners and cutters, \$2.50@4.50. A few light to medium steers that have been having some corn are being taken at around \$7.25@7.50, as high as \$7.75 having been reached, but bulk of stock cattle of all weights between \$6.00 and \$7.00. Choice veal calves up to \$11.25. Receipts this week will run about 10,500.

In the hog trade receipts are continuing to come in liberal volume, although there is some dropping off compared with the last weeks in March. Price fluctuations are rather narrow, don't get far away from the \$8.00 mark with bulk on day of this writing at a flat \$7.95. Quality is very good but is spreading out slightly of late. Total this week will be close to 70,000.

Not enough sheep coming to make a market. Packers are bringing in their kill from other markets. Choice fed lambs are worth around \$14.25, clipped lots around \$11.25. Choice fat ewes about \$8.75.

ST. PAUL.

(Reported by U. S. Bureau of Agricultural Economics and Minnesota Dept. of Agriculture.)

South St. Paul, Minn., April 4.

Cattle receipts up to mid-week totaled slightly over 7,000 head, compared with actual marketings of 8,167 for the same period a week ago. With the light supply of cattle and a somewhat broader demand, trade on killing classes ruled strong all week. Present prices are strong to 25c

or more higher than a week ago. No choice or prime steers or heifers were offered.

Beef steers, good, \$8.50@9; medium, \$7.50@8.50; common, \$6.25@7.50. Fat heifers, \$5.75@8.25; bulk, \$6@7. Fat cows, \$4.25@7.25; bulk, \$5@6. Bologna bulls, \$4.25@4.75; bulk, \$4.50 or over. Veal calves today, \$7.50@8.50; bulk, \$7.50@7.75.

Hog supplies have shown some falling off this week, the total for the first three days being about 35,000, compared with 44,000 a week ago and 23,000 a year ago. Demand on the part of packers has been comparatively broad, and the market has shown gradual strength, advancing around

(Continued on page 47.)

PACKERS' PURCHASES.

Purchases of livestock by packers at principal centers for the week ending Saturday, March 31, 1923, are reported by The National Provisioner as follows:

CHICAGO.

	Cattle.	Hogs.	Sheep.
Armour & Co.	5,381	22,100	16,652
Swift & Co.	6,481	20,400	18,688
Morris & Co.	5,067	17,300	7,945
Wilson & Co.	5,632	19,100	7,929
Anglo-Amer. Prov. Co.	1,536	6,200	.....
G. H. Hammond Co.	2,790	10,500	.....
Libby, McNeill & Libby	769	.....	.....
Brennan Packing Co.	5,600	hogs; Miller & Hart,	.....
7,290 hogs; Independent Packing Co., 4,800 hogs;	.....	.....	.....
Boyd, Lanham & Co., 6,600 hogs; Western Packing and	.....	.....	.....
Provision Co., 15,200 hogs; Roberts & Oake, 7,100	.....	.....	.....
hogs; others, 18,000 hogs.	11	.....	.....

KANSAS CITY.

	Cattle.	Calves.	Hogs.	Sheep.
Armour & Co.	3,444	802	10,043	5,303
Cudahy Pkg. Co.	2,447	998	8,869	4,430
Fowler Pkg. Co.	620	4	.....	.....
Morris & Co.	3,192	947	9,636	2,480
Swift & Co.	4,355	1,004	18,887	7,206
Wilson & Co.	3,654	490	14,490	3,955
Local butchers	722	301	1,858	190
	18,643	4,546	63,783	24,743

OMAHA.

	Cattle and calves.	Hogs.	Sheep.
Armour & Co.	6,123	22,805	13,248
Cudahy Pkg. Co.	5,713	24,619	12,482
Dold Pkg. Co.	875	7,770	.....
Morris & Co.	3,664	15,552	4,840
Swift & Co.	7,292	22,477	13,122
Higgins Pkg. Co.	102	.....	.....
Hoffman Bros.	102	.....	.....
Mayerowich, Vail.	86	.....	.....
Mid West Pkg. Co.	48	.....	.....
O'Dea, P.	11	.....	.....
Omaha Pkg. Co.	60	.....	.....
John Roth & Sons	70	.....	.....
So. Omaha Pkg. Co.	87	.....	.....
J. W. Murphy	.....	9,556	.....
Swartz & Co.	.....	824	.....
Lincoln Pkg. Co.	288	.....	.....
Nagle Pkg. Co.	450	.....	.....
Sinclair Pkg. Co.	326	.....	.....
Wilson Pkg. Co.	450	.....	.....
Others	4	3,220	.....
	25,669	106,823	43,692

ST. LOUIS.

	Cattle.	Hogs.	Sheep.
Armour & Co.	3,241	5,069	2,244
Swift & Co.	2,242	9,800	1,877
Morris & Co.	357	1,918	127
St. Louis Dressed Beef Co.	1,165	.....	.....
Independent Pkg. Co.	455	4,244	181
East Side Pkg. Co.	603	5,497	135
Heil Pkg. Co.	33	1,561	.....
American Pkg. Co.	146	1,414	.....
Krey Pkg. Co.	58	887	.....
Sartorius Prov. Co.	11	403	.....
Sieloff Pkg. Co.	141	1,231	35
Butchers	8,683	21,547	331
	17,115	53,580	4,930

ST. PAUL.

	Cattle.	Calves.	Hogs.	Sheep.
Swift & Co.	2,873	7,028	31,135	1,309
Armour & Co.	1,861	4,724	20,491	1,270
Katz & Horn Pkg. Co.	258	70	48	.....
Hertz & Rifkin	284	127	.....	.....
King, J. R.	18	12	6	.....
Others	498	99	6,408	.....
	5,792	12,069	11,688	2,479

SIoux CITY.

	Cattle.	Calves.	Hogs.	Sheep.
Cudahy Pkg. Co.	2,596	123	26,203	1,253
Armour & Co.	2,066	46	27,759	1,537
Swift & Co.	958	35	774	.....
Sacks Bros. Pkg. Co.	50	80	.....	.....
Smith Bros. Pkg. Co.	29	41	.....	.....
Local butchers	60	42	.....	.....
Eastern packers	93	.....	27,110	.....
	6,501	391	81,877	2,710

ST. JOSEPH.

	Cattle.	Calves.	Hogs.	Sheep.
Swift & Co.	2,798	486	25,835	15,360
Hammond Pkg. Co.	2,253	430	15,460	4,280
Morris & Co.	2,165	452	13,318	4,280
Others	4,151	223	7,812	5,445
	11,367	1,571	62,434	27,690

OKLAHOMA CITY.

	Cattle.	Calves.	Hogs.	Sheep.
Morris & Co.	1,069	715	6,192	.....
Wilson & Co.	1,009	559	6,672	.....
Other butchers	58	29	227	.....
	2,136	1,303	13,091	114

CINCINNATI.

	Cattle.	Calves.	Hogs.	Sheep.
E. Kahn's Sons Co.	490	188	3,518	290
Kroger Groc. & Bak. Co.	352	255	1,168	.....
C. A. Freund.	183	110	230	.....
Gus Juengling	198	70	.....	50
J. F. Schroth Pkg. Co.	107	.....	3,241	.....
H. H. Meyer Pkg. Co.	16	.....	2,178	.....
J. Hilberg & Son.	262	.....	.....	.....
W. G. Rehn's Sons.	201	7	.....	.....
Peoples Pkg. Co.	124	320	.....	.....
J. Bauer & Son.	191	.....	.....	.....
A. Sander Pkg. Co.	.....	2,490	.....	.....
Jacob Vogel & Son.	.....	952	.....	.....
J. Hoffman's Sons Co.	.....	769	.....	.....
Lohrey Pkg. Co.	.....	221	.....	.....
Ideal Pkg. Co.	.....	825	.....	.....
Sam Gail	.....	.....	.....	181
J. Schlacter's Sons	.....	.....	.....	.....
Ehrhart & Sons.	.....	.....	.....	.....
F. Blackburn	.....	.....	.....	.....
J. Stegner	.....	.....	.....	7
	2,124	960	15,302	676

INDIANAPOLIS.

	Cattle.	Calves.	Hogs.	Sheep.
Eastern buyers	1,102	3,978	8,660	622
Kingman & Co.	1,063	500	19,165	194
.....	.....	.....	3,098	.....
Ind. Abat. Co.	1,104	.....	.....	18
Armour & Co.	92	62	4,124	.....
Hilgemeier & Bro.	3	.....	720	.....
Brown Bros.	123	21	138	.....
Riverview Pkg. Co.	30	13	100	.....
Schussler Pkg. Co.	43	.....	442	.....
Meier Pkg. Co.	.....	.....	365	.....
Ind. Prov. Co.	.....	46	354	.....
Worm & Co.	112	.....	80	.....
Miscellaneous	223	214	374	33
	4,525	3,921	40,885	867

WICHITA.

	Cattle.	Calves.	Hogs.	Sheep.
Cudahy Pkg. Co.	542	603	10,470	145
Dold Pkg. Co.	240	17	4,780	.....
Local butchers	80	20	.....	.....
	862	640	15,250	145

DENVER.

	Cattle.	Calves.	Hogs.	Sheep.
Swift & Co.	673	225	3,705	1,367
Armour & Co.	679	89	3,377	2,065
Blayney-Murphy Co.	314	.....	823	25
Miscellaneous	390	35	1,598	721
	2,056	349	8,503	2,318

MILWAUKEE.

	Cattle.	Calves.	Hogs.	Sheep.
Plankinton Pkg. Co.	925	13,702	8,977	9
Swift & Co.	47	.....	.....	.....
The Layton Co.	.....	1,593	.....	.....
R. Gunz & Co.	112	.....	155	.....
P. C. Gross.	83	54	.....	.....
Butchers	192	440	131	16
Traders	356	217	23	.....
	1,715	14,113	10,879	25

RECAPITULATION.

Recapitulation of packers' purchases by markets for the week ending March 31, 1923, with comparisons:

	Cattle.	Calves.	Hogs.	Sheep.
Chicago	163,100	27,353	154,700	28,671
Kansas City	63,783	18,643	18,884	.....
Omaha	25,669	20,070	20,070	.....
St. Louis	17,115	15,252	15,252	.....
St. Joseph	11,367	11,104	11,104	.....
St. Paul	6,501	6,664	6,664	.....
Oklahoma City	5,792	2,450	2,450	.....
Cincinnati	2,124	2,411	2,411	.....
Indianapolis	4,525	5,105	5,105	.....
Wichita	862	1,039	1,039	.....
Denver	2,056	2,277	2,277	.....
Milwaukee	1,715	1,625	1,625	.....

Hogs.	.....	.....	.....	.....
Chicago	163,100	154,700	154,700	.....
Kansas City	63,783	63,783	63,783	.....
Omaha	25,669	25,669	25,669	.....
St. Louis	17,115	17,115	17,115	.....
St. Joseph	11,367	11,367	11,367	.....
St. Paul	6,501	6,501	6,501	.....
Oklahoma City	5,792	5,792	5,792	.....
Cincinnati	2,124	2,124	2,124	.....
Indianapolis	4,525	4,525	4,525	.....
Wichita	862	862	862	.....
Denver	2,056	2,056	2,056	.....
Milwaukee	1,715	1,715	1,715	.....

Sheep.	.....	.....	.....	.....
Chicago	51,114	52,850	52,850	.....
Kansas City	24,743	24,743	24,743	.....
Omaha	43,692	43,692	43,692	.....
St. Louis	4,930	4,930	4,930	.....
St. Joseph	27,000	27,000	27,000	.....
St. Paul	2,479	2,479	2,479	.....
Oklahoma City	2,700	2,700	2,700	.....
Cincinnati	114	114	114	.....
Indianapolis	675	675	675	.....
Wichita	867	867	867	.....
Denver	145	145	145	.....
Milwaukee	2,318	2,318	2,318	.....
	25	25	25	.....

HIDE AND SKIN MARKETS

(SHOE AND LEATHER REPORTER)

Chicago.

PACKER HIDES.—Two packers sold about 10,500 Feb.-March extreme light native steers at 15c, a steady level with asking prices of the past few weeks. The 4,000 light cows sold yesterday at 14½c included a few Aprils. No further movement noted in branded cows at the new level of 13½c. No additional sales of local small packers noted at 15½c. Several bids off 15c are noted for April small packers but refused. Tanners decline to pay more at this time. Natives quoted 18¾@20c; Texas and butts, 18@19c; Colorados, 17@18c; branded cows, 13½@14½c; heavy cows, 15c last paid for Jan.; winter stuff held that figure; buyers talk lower; light cows, 14¼@14½c paid; bulls, 13c; branded, 11¼@13c.

SMALL PACKER HIDES: The undertone hides are much more optimistic regarding their future prospects than at any time since the turn of the year. This feeling is occasioned by the movement in local small packer hides at 15½c for April take-off registering 1½c advance over March kill. Prevailing rates on business going now in all weight hides are ranged at 12¼@12½c but collectors as a rule have advanced their views on forward movement to 13c delivered Chicago basis. Heavy steers here are quiet and entirely nominal about a 14c plane. Heavy cows and butts of current mixed quality quoted at 12½c paid and freely bid with dealers talking up to 13c. Extremes command 13½c and numerous opportunities to sell are given by tanners, but dealers wish to secure 14c for the mildly grubby parcels and talk slightly higher for strictly grub free lots. Branded country hides are priced at 10½@11c for average lots flat basis. Some western extreme light weights are priced up to 12½c flat f. o. b. Bulls are strong in tone and ranged at 11@11¼c asked with stocks small; country packers, 12½@13½c paid as to dates; glues, 8½c.

NORTHWESTERN HIDES.—Twin Cities markets are passive awaiting further developments. Dealers talk quite strongly and are doing little additional business. All weights quoted 13c asked; heavy hides are held at 12½@13c inside about buyers' views. Lights quoted 13½c asked and paid; bulls, 11c; kipskins, 13½@14c; calfskins, 15@17c; outside for 1st salted lots; horse, \$4.50@5.00.

CALFSKINS.—Calfskins remained quiet following the disposition of the balance of the packer march skins at 18c. City collectors want 17½c and ask that figure firmly. Outside varieties are quoted 17@17½c asked for first salted lots, and about 14@15c for resalted mixed varieties. Deacons 95c@1.15; slunks sold to the extent of close to 25,000 packer regulars at \$1.15, or a dime lower. Kipskins are quiet. Packers last sold at 15¼@16c and cities 14@15c for points; good mixed skins made 14@14½c; bids for 13½c rejected.

MISCELLANEOUS MARKETS.—Dry hides continue quiet at 17@18c; horse hides are steady. Renderers are held up to \$5.75 and good mixed at \$5.00@5.25; countries, \$4.50@4.75 asked; packer sheepskins \$3.45@3.60 paid and nominal; small packers range down to \$3.00; shearlings made \$1.12½@1.17½ in last movement; pickled skins, \$5.75@6.00; dry pelts, 27½@30c; hogskins, 15@25c; strips, 5½@6c.

New York.

PACKER HIDES: Nothing additional in the way of business is reported in city slaughter stock since the 6,000 Jan.-Feb.-Mar. cows sold at 13½c by three killers. Native steers made 19c, as previously noted for December kill at outside houses, largely straight heads. Negotiations are still pending on the fall brands. Killers talk 17½c for butts and a cent less on Colorados. Winter kill is generally held at the same figures and buyers talk at least half a cent lower. Bulls 12½c paid.

SMALL PACKER HIDES: The undertone to the eastern small packer situation is still strong, with most killers well sold up on their winter goods and not talking on the forward materials as yet. Two cars Brooklyn Jan.-Feb.-Mar. steers made 17c for natives and 15c for brands. Couple cars Canadian winter natives sold at 17c. All weight winter cows are quoted 13½@14c paid and up to 14½c now asked. Spring hides are considered worth a cent more.

COUNTRY HIDES: Tanners in the east are making more strenuous efforts to locate material and are bidding 13½c for extremes and 12½c for butts for mixed quality current receipts containing a few grubs in Penn., Ohio, and similar sections. Nothing is available in such quality under 13c and 14c and some of the sellers have advanced their ideas to 14½c basis on extremes. Western lights are quoted 13½c paid and 14c asked. Southern lots quoted at 12@13½c for lights. Canadians sold up to 13c flat for ordinary current receipts.

CALFSKINS: Bids of \$2.50 are reported refused for heavy end of N. Y. City calfskins and collectors have advanced their views to \$2.65. Three weight skins last sold at \$1.25@1.40-1.95-2.50. Collectors are inclined to spring their asking levels, owing to the increasing demand and the good quality of fresh skins. Penn. cities, which last sold on a basis of \$1.15, are now held at \$1.25@1.80-2.30. Untrimmed lots are ranged up to 17c. A line of 60,000 Courland calfskins sold at \$1.22 each. Kips \$3@4 nominal.

FOREIGN WET SALTED HIDES: Business in frigorifico hides has not been resumed with any great freedom following the Easter holidays, as only a lot of 5,000 Swift LaPlatas cows has moved and these were barely steady at 16½c landed basis. Standard Argentine steers last sold at 23c and the Montevideo varieties brought 23½@23¾c range. The unsold holdings are of relatively small proportions. Traders confidently expect business to be resumed in some volume before the week end. Frigorifico type hides also continue quiet and are quoted entirely nominal, about

HIDE AND SKIN STOCKS SUMMARY.

Following are the hide and leather stocks on hand March 1, as reported by the U. S. Census Bureau together with comparisons for other months:

	Mar. 1, 1923.	Feb. 1, 1923.	Mar. 1, 1922.
Cattle—Total, pes.	6,771,839	6,384,131	5,761,394
Packer, pes.	3,216,005	3,283,205	.....
Country, pes.	2,079,885	1,750,741	.....
Foreign, pes.	1,476,289	1,350,185	.....
Calf and kip, pes.	3,716,656	4,086,044	3,770,581
India tanned, pes.	79,436	74,633	.....
Horse	153,443	155,287	209,934
Fronts, pes.	107,242	127,215	.....
Butts, pes.	382,630	409,755	.....
Shanks, pes.	58,605	47,620	.....
Goat, pes.	7,950,484	8,938,007	7,627,048
Cabrettas, pes.	967,535	1,079,410	455,972
Kangaroo, pes.	312,823	282,578	223,835
Sheep, pes.	9,085,435	9,188,283	13,044,644
Hog skins, pes.	45,071	95,440	148,542
Hog strips, lbs.	442,506	402,470	231,175
Deer and elk, pes.	169,506	207,313	245,396
Buffalo, pes.	120,228	127,624	157,439
Skivers, pes.	1,679,720	1,814,877	.....

19½@20½c for business; frigorifico extremes 17¼@17½c. Campos and other common types range at 12@13c. Spot hides are steady with late business in Panamas at 15c and in Commissary goods at 18c, involving about a car each figure.

ST. PAUL LIVESTOCK MARKETS.

(Continued from page 46.)

25c on the average compared with a week ago.

Extreme top on 150 to 170 lb. hogs today, \$8.30; bulk, 150 to 300 lb. averages, \$8@8.20; packing sows, \$6.75@7; stags mostly \$5.50; pigs, 80 to 130 lb., mostly \$7.75@7.85.

Sheep receipts are very light, fat sheep holding about steady for the week with lambs strong to 25c higher. Best fed lambs are bringing around \$14@14.25; choice shorn, 74 lb. lambs today, \$11.90; 100 to 190 lb. fat ewes, \$7@8.75; bucks, \$5.

LOUISVILLE.

(Special Letter to The National Provisioner.)

Louisville, Ky., April 4, 1923.

Around 2,000 cattle arrived at this market for the first half of the week. A good portion of the offerings consisted of steers which found a slow and fully 25c lower trade, although several loads brought as high as \$8.50. The nice tidy butcher stock found a good call at unchanged rates, with the medium kinds slow and lower. Cow

(Continued on page 48.)

CHICAGO HIDE QUOTATIONS.

(Special Report to The National Provisioner from J. F. Nicolas.)

Chicago, April 7, 1923.—Quotations on hides at Chicago for the week ending April 7, 1923, with comparisons, are as follows:

	Week ending April 7, '23.	Week ending Mar. '31, '23.	Corresponding week, 1922.
Spread native steers	20 @ 22c	20 @ 21c	@ 15½c
Heavy native steers	19 @ 20c	18½ @ 19c	13 @ 13½c
Heavy Texas steers	18 @ 19c	@ 18c	12½ @ 13c
Heavy butt branded steers	18 @ 19c	@ 18c	12 @ 12½c
Heavy Colorado steers	17 @ 18c	@ 17c	11 @ 11½c
Ex-Light Texas steers	13½ @ 14c	@ 13c	10 @ 10½c
Branded cows	13½ @ 14c	@ 13c	10 @ 10½c
Heavy native cows	15 @ 16c	15 @ 15½c	11 @ 12c
Light native cows	14½ @ 15½c	@ 14½c	@ 11c
Native bulls	13½ @ 14c	@ 13½c	7½ @ 8c
Branded bulls	11½ @ 13c	@ 11½c	6 @ 6½c
Calfskins	@ 18c	@ 18c	17 @ 17½c
Kip	15½ @ 16c	16 @ 16½c	15 @ 15½c
Slunks, regular	\$1.25@1.35	\$1.25@1.40	\$1.20@1.30
Slunks, hairless	.35 @ 75c	.35 @ 75c	.35 @ 75c
Light, Native, Butts, Colorados and Texas steers	1c per lb. less than heavies.		

CITY AND SMALL PACKERS.

	Week ending April 7, '23.	Week ending Mar. '31, '23.	Corresponding week, 1922.
Native cows	14 @ 15½c	14 @ 14½c	11½ @ 12c
Bulls, native	12 @ 13½c	11½ @ 12c	6 @ 7c
Branded hides	12 @ 13½c	11½ @ 12c	7 @ 8c
Calfskins	17½ @ 17c	16½ @ 17c	16 @ 17c
Kip	15½ @ 16c	15 @ 16c	15 @ 16c
Light calf	\$1.30@1.35	\$1.30@1.35	\$1.25@1.30
Slunks, regular	\$1.00@1.10	\$1.00@1.10	\$1.00@1.10
Slunks, hairless	.35 @ 70c	.35 @ 70c	.30 @ 60c

COUNTRY HIDES.

	Week ending April 7, '23.	Week ending Mar. '31, '23.	Corresponding week, 1922.
Heavy steers	13 @ 14c	12½ @ 13½c	@ 8½c
Heavy cows	12½ @ 13½c	12 @ 13c	@ 8½c
Butts	12½ @ 13½c	12 @ 13c	@ 8c
Extremes	13 @ 14½c	12½ @ 13½c	@ 10c
Bulls	11 @ 11½c	10 @ 10½c	@ 6c
Branded	11 @ 11½c	10 @ 10½c	@ 6c
Calfskins	14 @ 15c	13 @ 14c	14 @ 15c
Kip	13 @ 14c	13 @ 14c	12 @ 13c
Light calf	\$1.10@1.20	\$1.10@1.20	\$1.15@1.25
Deacons	\$0.90@1.00	\$0.90@1.00	\$0.95@1.05
Slunks, regular	@ 75c	50 @ 60c	@ 70c
Slunks, hairless	@ 30c	25 @ 30c	@ 35c
Horsehides	\$4.50@5.00	\$4.50@5.00	\$3.00@4.00
Hogskins	15 @ 20c	15 @ 20c	20 @ 25c

Prices quoted are f. o. b. Chicago or Chicago freight equalized, for straight carloads or more to tanners. Dealers' price range ½¢ to 2¢ per lb. less.

SHEEPSKINS.

	Week ending April 7, '23.	Week ending Mar. '31, '23.	Corresponding week, 1922.
Large packers	\$3.45@3.60	\$3.45@3.60	\$2.25@2.35
Small packers	\$3.00@3.30	\$3.00@3.40	\$2.00@2.10
Packer shearlings	\$1.10@1.15	\$1.15@1.20	\$0.50@0.60
Country pelts	\$1.75@2.75	\$1.75@2.75	\$1.50@2.00
Dry pelts	27 @ 31c	27 @ 31c	17 @ 20c

ICE AND REFRIGERATION

ICE NOTES.

Messrs. Blidt and Dout are going to erect a new ice plant at North Little Rock, Ark.

Otto Erickson is going to build a new ice plant and cold storage at Aberdeen, Wash.

The City and Fuel Co., Lodi, Cal., is going to make extensive additions to their plant.

The Wills Point Ice Co., Wills Point, Tex., has been incorporated with a capital of \$12,000.

The Lone Star Ice Co., San Antonio, Tex., has been incorporated and will erect a new plant.

The Empire State Ice Co., Weehawken, N. J., is going to erect a large ice plant to cost about \$40,000,000.

The Tuscaloosa Railway and Facilities Co., Birmingham, Ala., is going to erect a cold storage plant to cost about \$20,000.

The City Coal and Ice Co., Raleigh, N. C., has been incorporated with a capital of \$100,000 by J. W. Zachary, J. S. Trowd and others.

The Diamond Ice and Cold Storage Co., Fort Worth, Tex., has been incorporated with a capital of \$40,000 by E. F. Strube and others.

The City Ice and Coal Delivery Co., Beaumont, Tex., has been incorporated with a capital of \$20,000 by L. M. Josey and others.

The Providence Ice Co., Providence, Ky., has been incorporated with a capital of

\$30,000 by W. B. Snow and F. V. and D. I. Ruckman.

The Valley Produce and Cold Storage Co., Harlingen, Tex., has been incorporated with a capital of \$15,000 by R. H. Cameron and others.

FRANCE EATS LESS FROZEN MEAT.

Two of the largest vessels carrying meat from the Argentine to France are about to convert their refrigerating space into ordinary cargo space, according to a report to the U. S. Department of Commerce from Marseilles. These vessels operate out of Marseilles and their capacity for carrying frozen meat amounts to 12,000 cubic meters out of a total of 55,000 cubic meters on all French merchant ships. This change is considered significant of the diminishing demand in France for imported frozen meat.

ARGENTINE CATTLE INDUSTRY HIT.

The Argentine cattle industry is in a demoralized condition as a result of overproduction due to high prices during the war, according to D. S. Bullock, representative of the U. S. Department of Agriculture just returned from a two years' study of the situation in Argentina.

During the war Argentine cattle raisers kept all female animals for breeding purposes, and a tremendous over-supply for which there is practically no market has

developed. Five and six year old cows in January were selling for less than \$10 a head, Mr. Bullock reports.

A warning is also sounded to American breeders that there is now no market in Argentina for purebred live stock other than for dairy cattle and hogs. Breeding operations in Argentina are at a standstill. Hog prices have dropped about 30 per cent since the war.

"The present depression has been gradually becoming more and more acute during the past two years, following seven years of high prices and unprecedented prosperity," Mr. Bullock says. "Late in 1920 cattle prices began to fall rapidly and by July, 1921, chilled beef steers, which had sold during the boom for the equivalent of \$100 to \$125 per head brought less than \$50. In January this year the quotation was \$38 or approximately \$3 per 100 pounds, live weight.

"Since cattle raising is the most important industry in Argentina the cattle crisis has become a political issue and bills are now before the Argentine Congress to regulate more closely the packing houses and auction markets to prevent combinations in restraint of trade, and finally to establish a Government-owned packing house.

"Although cattle prices were approximately \$5 per 100 pounds lower in Argentina than in Chicago, figures show only small exports to the United States. With the present tariff of 3 cents per pound and relatively high ocean freight rates it does not seem probable that Argentine beef can compete in United States markets," Mr. Bullock says.

LOUISVILLE LIVESTOCK MARKET.

(Continued from page 47.)

trade was hardly as brisk as the previous week. Stocker and feeder trade was dull and unevenly lower with sales limited.

Prime heavy steers, \$8@8.50; beef steers, \$5.50@8.50; cows, \$2@6.50; feeders, \$6@7.25; stockers, \$3.50@6.50; bulls, \$3.50@5.75.

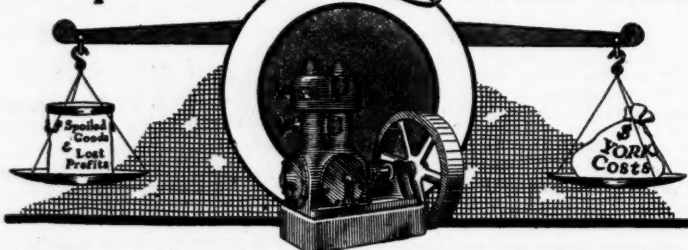
Supply opening day of this week was large, nearly 6,000, but with a good active all-around demand prices held steady although showing a dime gain Tuesday and steady again for the mid-week trade. The local call continues brisk and offerings were readily cleared at the prevailing prices.

Top hogs, 165 lbs. to 250 lbs., \$8.50; 120 lbs. to 165 lbs., \$8.10; 250 lbs. up, \$8.05; pigs, 90 lbs. to 120 lbs., \$6.90; 90 lbs. down, \$5; throwouts, \$6.60 down.

Calf run for the first three days shows a falling off compared with the previous week and with a 50c decline Monday, tops are bringing \$9 with medium and common calves slow at unevenly lower prices.

Sheep and lamb receipts have been small with a quiet and steady trade. Best fall lambs \$13 down; best fat sheep, \$6 down. Limited demand at present for spring lambs at \$15 down.

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Detroit—Brennan Truck Co.
El Paso—R. E. Huthstetner, 615 Mills Bldg.
Jacksonville—Jacksonville Warehouse & Distributing Co.

Los Angeles—Mailliard & Schmiedell.
Mexico, D. F.—F. Besaury, Jr., 7 a de Colima 225 B.
New York—Roessler & Hasselacher Chemical Co., 709 6th Ave.
Newark—American Oil & Supply Co.
New Orleans—O. E. Lewis & Co., Inc., 638 Camp St.
Norfolk—Southgate Forwarding & Storage Co.
Pittsburgh—Pennsylvania Transfer Co.; Pennsylvania Brewers Supply Co., 158 10th St.

Philadelphia—Henry Bower Chemical Mfg. Co.
Richmond—Bowman Transfer & Storage Co.
Rochester—Rochester Warehouse & Distributing Co., 1 Mt. Hope St.
Savannah—Savannah Brokerage Co.
San Francisco—Mailliard & Schmiedell.
Seattle—Mailliard & Schmiedell.
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SLAUGHTER REPORTS.

Special reports to The National Provisioner show the number of livestock slaughtered at the following centers for the week ending Saturday, March 31, 1923:

CATTLE.

	Week ending Mar. 31.	Previous week.	Cor. 1922.
Chicago	27,253	28,677	30,692
Kansas City	23,504	23,517	19,685
Omaha	23,203	17,195	13,698
East St. Louis	10,847	10,990	4,425
St. Joseph	8,666	8,307	5,198
Sioux City	6,447	6,253	4,611
Cudahy	891	718	651
Philadelphia	2,014	2,401	2,418
Indianapolis	1,748	1,564	1,517
Boston	1,482	1,264	.....
New York and Jersey City	10,554	9,723	9,544
Oklahoma City	3,439	3,967	4,588
Milwaukee	1,332	337	.....

HOGS.

	1923.	1922.
Chicago	163,100	154,700
Kansas City	64,130	63,603
Omaha	70,991	54,819
East St. Louis	54,805	62,101
St. Joseph	55,816	44,924
Sioux City	46,933	47,933
Cudahy	18,490	17,046
Cedar Rapids	12,100	10,400
Ottumwa	12,516	15,153
South St. Paul	52,300	52,300
Fort Worth	9,800	10,100
Philadelphia	29,359	22,635
Indianapolis	29,483	25,962
Boston	21,852	18,010
New York and Jersey City	56,316	54,150
Oklahoma City	13,091	13,349
Milwaukee	10,879	8,010
Cincinnati	17,100	11,500

SHEEP.

	1923.	1922.
Chicago	57,114	52,856
Kansas City	25,134	25,925
Omaha	40,177	38,471
East St. Louis	4,835	2,604
St. Joseph	21,032	24,034
Sioux City	2,694	2,762
Cudahy	342	281
Philadelphia	5,442	2,065
Indianapolis	236	541
Boston	3,254	3,440
New York and Jersey City	33,983	33,684
Oklahoma City	114	32
Milwaukee	25	24

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Chicago Section

Packers' purchases of livestock at Chicago for the first four days of this week totaled 34,145 cattle, 13,115 calves, 78,810 hogs, and 52,083 sheep.

Swift & Company's sales of carcass beef in Chicago for the week ending Saturday, March 31, for shipment sold out, ranged from 7@17.50 cents per pound, averaged 16.62 cents per pound.

Provision shipments from Chicago for the week ending March 31, 1923, with comparisons, 000's omitted, were as follows:

	Last wk.	Prev. wk.	Last yr.
Cured meats	11,424	14,517	9,814
Lard	8,952	11,368	4,407
Fresh meats	20,007	26,288	23,896
Pork	4	6	3
Canned meats	12	8	9

Chester M. Heinemann has opened a new retail market at 446 W. 75th street. A unique feature of this new enterprise is that it is said to be the only retail market in the country, so far as known, which sells only government-inspected meats. Handsome signs in the market indicate this fact, and inform customers that every piece of meat they buy is protected by the government inspection mark.

A new boiled ham concern will enter the Chicago market on May 1. It is incorporated as the W. E. Seipp Provision Company, and will be located at 1444 West Lake street. They are now putting in the necessary equipment for handling the business. Mr. W. E. Seipp is well known to the Chicago and Eastern trade, having had a wide experience in the selling end. Mr. R. Cyze has been very successful in the operating end of the boiled ham business, and is also well known to the Chicago trade. Their many friends will wish them much success in their new enterprise.

MORRIS MEN GO TO WILSON.

More than a dozen executives and department heads of Morris & Company have moved in a body into the offices of Wilson & Co., having been taken into the latter firm following the formal \$530,000-000 merger of Armour & Company and Morris & Co.

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HENSCHEN & McLAREN
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1637 Prairie Ave. Chicago, Ill.
PACKING PLANTS AND COLD STORAGE
CONSTRUCTION

Fred J. Anders Chas. H. Reimers
Anders & Reimers
ARCHITECTS
ENGINEERS
314 Erie Bldg. Cleveland, O. Packing House
Specialists

Only one chief executive of Morris & Company will make the change to Wilson. This is C. M. Macfarlane, vice-president, treasurer and a director, who will assume those posts in the Wilson organization. None of the Morris chiefs will go to Armour & Company. Nelson Morris, chairman of the board, and Edward Morris, president, will remain with the consolidated companies until all the loose ends of

Meat Trade Movies—No. 32.



LOOKING FOR A DROP!

The golf season is close at hand, and the vice president of Miller & Hart, Inc., may be seen looking over a last season's score-card, and hoping that figures will be lower this year, whether on holes or hogs. When it comes to figuring, "Dave" Robertson is famous!

the deal are gathered up and are now undecided as to what they will do afterward. H. A. Timmins and L. H. Heymann, vice-presidents, will retire, and T. R. Buckham, secretary, will remain with the Morris interests.

Virtually all of the plant workers and

other employees of Morris will be kept by Armour & Company, it is said, at least for the time being.

Some of Important Changes.

Among the more than dozen department heads who are to make the jump to Wilson & Company, and the positions they hold with the Morris plant are:

C. M. Macfarlane, vice-president, treasurer and director.

H. S. Bicket, manager provision department.

John W. Paton, dressed beef sales director.

Fred A. Rochester, director of publicity.

Jack W. Reis, city sales manager.

E. H. Branding, car route manager.

J. R. Stephenson, manager fresh pork department.

John Turner, manager sausage department.

Ernest Kissling, manager lard department.

Julius Larson, garage superintendent.

J. Feldsine, assistant, provision department.

C. L. Purcell, assistant manager casing department.

G. W. Peterson, assistant manager property department.

Other department managers who are going elsewhere are:

A. W. McLaren, traffic manager, will be associated with Chicago Bearing Metal Company as vice-president in charge of sales.

P. H. Lindstrom, manager of the hotel and cut-meat department, has organized and will be president of his own company to supply the hotel, restaurant and institutional trade throughout the country.

Douglas F. O'Brien, manager of the ammonia department, is now sales manager of the Barret Company, New York.

Where Other Morris Men Go.

Chas. N. Bird, head cattle buyer for Morris & Company, and John M. Nichols, head hog buyer for the same firm, have severed their connection with Morris & Company and become associated with Ralph W. Wright, for 20 years a commission man at the Kansas City Stock Yards, in a general livestock commission business under the firm name of Wright, Bird, Nichols Live Stock Commission Company.

Mr. Bird and Mr. Nichols were with Morris & Company about 28 years. They have been associated together for the past 18 years in Kansas City.

They opened the Morris plant at St.

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ENGINEERS AND ARCHITECTS
Specializing in Packing Houses, Abattoirs,
Ice Making and Refrigerating Plants. Lard
and Fat Rendering Plants, Oil Refineries
136 Liberty Street NEW YORK

Joe, Missouri, in 1897, and when the Morris plant was built in Kansas City they bought the first cattle and hogs that were killed in that plant. These men will devote considerable time to looking after eastern order buying trade.

CHICAGO STOCKS OF PROVISIONS.

Stocks of provisions in Chicago at the close of business March 31, 1923, with comparisons, as reported to the Board of Trade, are as follows:

	Mar. 31, 1923.	Feb. 28, 1923.	Mar. 31, 1922.
M. pork, new, made since Oct. 1, 1922, bbls.	862	1,052	252
M. pork, made Oct. 1, 1921, to Oct. 1, 1922			
Other kinds of barreled pork, bbls.	24,713	21,894	28,252
*P. S. lard, made since Oct. 1, 1922, lbs.	8,704,646	7,396,011	28,572,058
P. S. lard, made Oct. 1, 1921, to Oct. 1, 1922			
P. S. lard, previous to Oct. 1, 1921, lbs.	4,799,850	3,832,700	5,141,505
Other kinds of lard, lbs.			
Short rib sides, made since Oct. 1, 1922, lbs.	3,995,131	1,659,250	121,763
Short rib sides, made previous to Oct. 1, 1922, lbs.			2,510
Short clear sides, Ex. short clear sides, made since Oct. 1, 1922, lbs.	312,483	287,513	99,101
Ex. short clear sides, made previous to Oct. 1, 1922, lbs.	642,320	724,715	562,231
Extra short rib sides, Dry salted short fat backs, lbs.	79,644	86,461	130,566
Dry salted shoulders, lbs.	5,852,971	5,562,050	6,373,237
Dry salted bellies, lbs.	165,188	236,579	269,993
Sweet pickled hams, lbs.	22,819,857	15,970,678	20,596,495
Sweet pickled skinned hams, lbs.	32,391,704	31,020,290	24,497,168
Sweet pickled bellies, lbs.	24,596,946	26,523,091	12,199,185
Sweet pickled Califf. or picnic hams, lbs.	9,230,540	11,676,494	8,064,913
Sweet pickled Boston shoulders, lbs.	12,643,985	9,856,741	6,881,462
Sweet pickled shoulders, lbs.	124,974	191,975	139,950
Other cuts of meats, lbs.	12,031,887	10,957,255	6,889,964
Total cut meats, lbs.	124,877,630	114,753,092	86,828,538

*In storage tanks and tierces.

MOVEMENT OF PRODUCT.

	Received— March, 1923.	Shipped— March, 1923.	March, 1922.
Pork, bbls.	200	21,782	22,877
Lard, gross weight, lbs.	8,005,000	8,698,000	45,728,000
Meats, gross weight, lbs.	2,263,000	2,493,000	58,209,000
Live hogs, No. 925,896	643,664	209,404	143,931
Average weight of hogs received March, 237; March, 1922, 240; March, 1921, 238.			

PORK PRODUCTS IN, BELGIUM.

The demand for pork products in January 1923 was generally good and prices in dollars remained stable, according to a report to the U. S. Department of Commerce. Prices in francs, however, changed continually with the fluctuating rate of the Belgian franc. The month began with a firm market and a good demand and practically no stocks. The demand for fat backs is calm. Heavy fat backs are in fair demand while lighter ones are neglected. The same is true for clear backs, but prices remain firm and there are no stocks. The market for picnic hams is active, demand being very good and stocks small in spite of the heavy arrivals.

CHICAGO LIVESTOCK.

RECEIPTS.

	Cattle.	Calves.	Hogs.	Sheep.
Monday, March 26	14,559	3,092	53,332	24,760
Tuesday, March 27	11,136	7,742	32,751	16,451
Wednesday, March 28	9,996	2,124	29,889	10,591
Thursday, March 29	10,307	6,170	36,850	10,631
Friday, March 30	4,645	1,470	36,070	10,192
Saturday, March 31	500	200	8,000	3,500
Total for week	51,143	20,607	196,892	76,125
Previous week	53,517	16,015	186,410	67,899
Year ago	47,245	20,019	133,540	63,776
Two years ago	46,339	18,922	124,211	96,707

SHIPMENTS.

	Cattle.	Calves.	Hogs.	Sheep.
Monday, March 26	2,891	232	11,643	6,334
Tuesday, March 27	2,487	237	2,892	3,539
Wednesday, March 28	3,182	114	2,634	4,550
Thursday, March 29	4,095	82	8,275	3,692
Friday, March 30	1,735	142	10,490	3,555
Saturday, March 31	100	100	2,500	1,500
Total for week	14,550	807	38,404	23,170
Previous week	16,306	208	43,589	18,645
Year ago	16,646	286	27,720	19,408
Two years ago	23,414	347	38,561	27,824

Receipts at Chicago for the year to March 31, 1923, with comparisons, were as follows:

	1923.	1922.	Year to date.
Cattle	724,602	719,487	10,215,000
Calves	186,833	209,807	7,507,000
Hogs	2,746,973	2,249,465	8,551,000
Sheep	956,507	952,488	8,905,000
Horses	9,563	12,583	
Cars	74,864	68,530	
Combined weekly hog receipts at eleven markets for 1923 to March 31, with comparisons:			
Week ending March 31	795,000	763,000	10,215,000
Previous week	763,000	757,000	
Corresponding week, 1922	489,000	7,507,000	
Corresponding week, 1921	454,000	8,551,000	
Corresponding week, 1920	499,000	8,905,000	
Average 1908 to 1922	438,000	8,313,000	

Combined receipts at seven points for the week ending March 31, 1923, with comparisons:

	Cattle.	Hogs.	Sheep.
Week ending March 31	174,000	670,000	205,000
Previous week	163,000	636,000	212,000
1922	150,000	380,000	163,000
1921	142,000	360,000	210,000
1920	152,000	407,000	138,000
1919	176,000	454,000	159,000
1918	203,000	503,000	116,000
1917	146,000	373,000	162,000
1916	95,000	335,000	149,000
1915	109,000	350,000	140,000
Average, 1915-22	147,000	395,000	155,000

*Calves at Omaha, St. Louis and St. Joseph counted as cattle.

Combined receipts at seven points to March 31, 1923, with comparisons:

	Cattle.	Hogs.	Sheep.
1923	2,330,000	8,551,000	2,641,000
1922	2,174,000	6,213,000	2,389,000
1921	2,127,000	6,704,000	2,822,000
1920	2,529,000	7,272,000	2,368,000

Chicago Stock Yards receipts, average weight and top and average prices for hogs for under-mentioned weeks:

	Number weight.	Average received, lbs.	Top.	Average.
Week ending March 31	196,900	240	\$ 8.65	\$ 8.20
Previous week	186,410	238	8.85	8.25
1922	133,540	240	10.60	10.05
1921	124,211	238	10.80	9.30
1920	115,243	240	16.30	15.20
1919	140,869	228	20.30	19.90
1918	161,355	241	18.10	17.40
1917	120,741	241	16.00	15.45
1916	113,329	219	9.95	9.70
1915	105,314	235	7.27½	6.95
1914	108,791	232	8.92½	8.80
1913	104,008	242	9.40	9.15
Average 1913-1922	112,700	233	\$12.75	\$12.20

*Receipts and average weight for week ending March 31, 1923, unofficial.
†Railroad strike curtailed receipts.

WEEKLY AVERAGE PRICE OF LIVESTOCK.

	Cattle.	Hogs.	Sheep.	Lambs.
Week ending March 31	\$ 9.05	\$ 8.20	\$ 8.00	\$13.65
Previous week	8.90	8.25	8.10	13.90
1922	7.75	10.05	9.50	14.00
1921	8.70	9.30	6.25	9.05
1920	12.50	15.20	13.55	18.00
1919	16.00	19.30	14.25	18.75
1918	13.75	17.40	15.40	18.60
1917	11.75	15.45	12.15	14.25
1916	9.00	9.70	8.20	10.30
1915	7.45	6.95	7.90	9.50
1914	8.55	8.80	6.70	7.50
1913	8.25	9.15	6.75	8.65
Average 1913-1922	\$10.40	\$12.20	\$10.00	\$12.90

Following is given the net supply of cattle, hogs and sheep for packers at the Chicago Stock Yards for weeks mentioned:

	Cattle.	Hogs.	Sheep.
*Week ending March 31	36,500	157,000	52,900
Previous week	37,151	142,821	49,234
1922	30,599	105,811	46,368
1921	22,945	85,648	68,883
1920	7,380	15,444	21,363
1919	36,076	117,611	36,211
1918	43,292	118,701	34,106

*Saturday, March 31, 1923, estimated.

Chicago packers' hog slaughter for the week ending March 31, 1923:

	This week.
Armour & Co.	22,100
Swift & Co.	6,200
G. H. Hammond Co.	20,400
Morris & Co.	10,500
Wilson & Co.	17,300
Boyd-Lunham	19,100
Western Packing Co.	6,600
Roberts & Onke	15,200
Miller & Hart	7,100
Independent Packing Co.	4,800
Brennan Packing Co.	5,600
Wm. Davies Co.	2,200
Agar Packing Co.	18,000
Others	163,100
Totals	154,700
Previous week	110,100
Year ago	85,300
Two years ago	22,500
Three years ago	22,500

Prices at Chicago, Thursday, April 5, 1923: CATTLE.

Beef Steers	
Med. and heavy wt. (1,100 lbs. up) —	
Choice and prime	\$9.40@10.50
Good	9.50@ 9.90
Medium	8.50@ 9.30
Common	7.25@ 8.50
Light weight (1,100 lbs. down) —	
Choice and prime	9.90@10.50
Good	9.40@ 9.90
Medium	8.25@ 9.40
Common	6.85@ 8.25
Butcher Cattle:	
Heifers, common choice	5.75@ 9.85
Cows, common choice	4.40@ 8.00
Bulls, bologna and beef	4.65@ 6.75
Canners and Cutters:	
Cows and heifers	3.50@ 4.40
Canner steers	3.75@ 5.00
Veal Calves:	
Light and med. weight, med. good and choice	8.00@10.25
Heavy weight, common choice	3.50@ 8.75

HOGS.

Top	\$ 8.75
Bulk of sales	8.30@ 8.70
Heavy weight (250 lbs. up), med. choice	8.30@ 8.60
Med. weight (200-250 lbs.), med. choice	8.50@ 8.75
Light weights (150-200 lbs.), com. choice	8.40@ 8.70
Light hogs (130-150 lbs.), com. choice	7.50@ 8.45
Packing sows (250 lbs. up), smooth	7.40@ 7.75
Packing sows (200 lbs. up), rough	7.25@ 7.50
Killing pigs (130 lbs. down), med. choice	6.50@ 7.75

SHEEP.

Lambs (85 lbs. down), med. prime	\$12.75@14.75
Culls and common	9.50@12.75
Yearling wethers	9.75@13.50
Wethers, medium prime	7.50@11.25
Ewes, medium choice	7.00@ 9.25
Culls and common	3.75@ 7.25
Feeding lambs, medium choice	13.00@14.25

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Chicago Provision Markets

CASH PRICES.

Based on Actual Carlot Trading, Thursday, April 5, 1923.

Green Meats.

Regular Hams—		
8-10 lbs. avg.	@17½	
10-12 lbs. avg.	@17	
12-14 lbs. avg.	@16½	
14-16 lbs. avg.	@16¼	
16-18 lbs. avg.	@15½	
18-20 lbs. avg.	@15¼	
Skinned Hams—		
14-16 lbs. avg.	@17½	
16-18 lbs. avg.	@17	
18-20 lbs. avg.	@16	
20-22 lbs. avg.	@14½	
22-24 lbs. avg.	@14	
24-26 lbs. avg.	@13½	
26-30 lbs. avg.	@13½	
Picnics—		
4-6 lbs. avg.	@9¼	
6-8 lbs. avg.	@8½	
8-10 lbs. avg.	@8¼	
10-12 lbs. avg.	@8¼	
Clear Bellies—		
6-8 lbs. avg.	@19½	
8-10 lbs. avg.	@17	
10-12 lbs. avg.	@14½	
12-14 lbs. avg.	@14	
14-16 lbs. avg.	@13½	
Pickled Meats.		
Regular Hams—		
8-10 lbs. avg.	@17½	
10-12 lbs. avg.	@16½	
12-14 lbs. avg.	@16¼	
14-16 lbs. avg.	@15½	
16-18 lbs. avg.	@15¼	
18-20 lbs. avg.	@15¼	
20-22 lbs. avg.	@15¼	
22-24 lbs. avg.	@15¼	
24-26 lbs. avg.	@15¼	
26-30 lbs. avg.	@15¼	
Skinned Hams—		
14-16 lbs. avg.	@17	
16-18 lbs. avg.	@16¼	
18-20 lbs. avg.	@16¼	
20-22 lbs. avg.	@14½	
22-24 lbs. avg.	@13½	
24-26 lbs. avg.	@13½	
26-30 lbs. avg.	@13½	
Picnics—		
4-6 lbs. avg.	@9¼	
6-8 lbs. avg.	@8½	
8-10 lbs. avg.	@8¼	
10-12 lbs. avg.	@8¼	
Clear Bellies—		
6-8 lbs. avg.	@17½	
8-10 lbs. avg.	@16½	
10-12 lbs. avg.	@14½	
12-14 lbs. avg.	@14	
14-16 lbs. avg.	@13½	
Dry Salt Meats.		
Extra ribs	@11¼	
Extra clears	@11¼	
Regular plates	8¼ @ 8½	
Clear plates	8¼ @ 8½	
Jowl butts	@7¼	
Fat Backs—		
8-10 lbs. avg.	@9¼	
10-12 lbs. avg.	@9	
12-14 lbs. avg.	@9	
14-16 lbs. avg.	@9	
16-18 lbs. avg.	@10¼	
18-20 lbs. avg.	@10¼	
20-25 lbs. avg.	@10¼	
Clear Bellies—		
12-14 lbs. avg.	@12¼	
14-16 lbs. avg.	@12½	
16-18 lbs. avg.	@12½	
20-25 lbs. avg.	@12½	
25-30 lbs. avg.	@12	
30-35 lbs. avg.	@11½	
Nominal asked.		

FUTURE PRICES.

Official Board of Trade Range of Prices.

SATURDAY, MARCH 31, 1923.

	Open.	High.	Low.	Close.
LARD—(Per 100 lbs.)—				
March	11.20	11.20	11.20	11.20
May	11.27½	11.30	11.15	11.20
July	11.45	11.47½	11.30	11.37½
Sept.	11.57½	11.57½	11.47½	11.50

RIBS—(Boxed 25c more than loose)—				
May	9.92½	9.92½	9.80	9.80
July	10.32½	10.32½	10.12½	10.12½
Sept.				10.42½

MONDAY, APRIL 2, 1923.

	Open.	High.	Low.	Close.
LARD—(Per 100 lbs.)—				
May	11.25	11.35	11.22½	11.35
July	11.45	11.53½	11.37½	11.52½
Sept.	11.55	11.67½	11.55	11.67½
RIBS—(Boxed 25c more than loose)—				
May	9.92½	10.02½	9.92½	10.02½
July	10.25	10.37½	10.25	10.37½
Sept.	10.62½	10.62½	10.62½	10.62½

TUESDAY, APRIL 3, 1923.

	Open.	High.	Low.	Close.
LARD—(Per 100 lbs.)—				
May	11.40	11.45	11.35	11.35
July	11.55	11.60	11.50	11.52½
Sept.	11.75	11.77½	11.70	11.70
RIBS—(Boxed 25c more than loose)—				
May	10.05	10.35	10.05	10.10
July	10.35	10.45	10.35	10.40
Sept.	10.60	10.72½	10.60	10.70

WEDNESDAY, APRIL 4, 1923.

	Open.	High.	Low.	Close.
LARD—(Per 100 lbs.)—				
May	11.40	11.45	11.37½	11.37½
July	11.57½	11.60	11.57½	11.57½
Sept.	11.75	11.80	11.75	11.77½
RIBS—(Boxed 25c more than loose)—				
May	10.40	10.55	10.40	10.47½
July	10.55	10.65	10.55	10.62½
Sept.	10.85	10.85	10.85	10.70

THURSDAY, APRIL 5, 1923.

	Open.	High.	Low.	Close.
LARD—(Per 100 lbs.)—				
May	11.42½	11.45	11.37½	11.37½
July	11.65	11.65	11.55	11.57½
Sept.	11.77½	11.77½	11.75	11.75
RIBS—(Boxed 25c more than loose)—				
May	10.55	10.55	10.40	10.47½
July	10.85	10.85	10.85	10.62½
Sept.	10.85	10.85	10.85	10.70

FRIDAY, APRIL 6, 1923.

	Open.	High.	Low.	Close.
LARD—(Per 100 lbs.)—				
May	11.32½	11.45	11.32½	11.45
July	11.52½	11.65	11.52½	11.65
Sept.	11.70	11.80	11.70	11.80
RIBS—(Boxed 25c more than loose)—				
May	10.35	10.47½	10.35	10.47½
July	10.55	10.55	10.55	10.70
Sept.	10.55	10.55	10.55	10.70

PORK CUTS AT NEW YORK.

(Special Report to The National Provisioner from H. C. Zann.)

New York, April 4, 1923.—Wholesale prices on green and sweet pickled pork cuts: Pork loins, 20¢@22¢; green hams, 8-10 lbs., 19¢; 10-12 lbs., 18¢; 12-14 lbs., 17½¢; green clear bellies, 6-8 lbs., 19¢; 8-10 lbs., 18¢; 10-12 lbs., 17½¢; 12-14 lbs., 17¢; green rib bellies, 10-12 lbs., 17½¢; 12-14 lbs., 17¢; sweet pickled clear bellies, 6-8 lbs., 14¢; 8-10 lbs., 14½¢; 10-12 lbs., 14¢; 12-14 lbs., 14¢; sweet pickled rib bellies, 10-12 lbs., 13½¢; 12-14 lbs., 13½¢; sweet pickled hams, 8-10 lbs., 18½¢; 10-12 lbs., 18¢; 12-14 lbs., 17¢; dressed hogs, 14¢; city steam lard, 11½¢; compound, 13½¢.

Western prices: Pork loins, 8-10 lbs., 17¢@17½¢; 10-12 lbs., 16¢; 12-14 lbs., 15¢; 14-16 lbs., 14¢; skinned shoulders, 13¢; boneless butts, 21¢@22¢; Boston butts, 15¢@16¢; lean trimmings, 12¢; regular trimmings, 9¢; spareribs, 10¢; neck ribs, 5¢@6¢; kidneys, 5¢@6¢; livers, 3¢; pig tongues, 15¢; pig tails, 13¢@14¢.

CHICAGO HOG PURCHASES.

Purchases of hogs by Chicago packers for the week ending Thursday, April 5, 1923, with comparisons, were reported to The National Provisioner as follows:

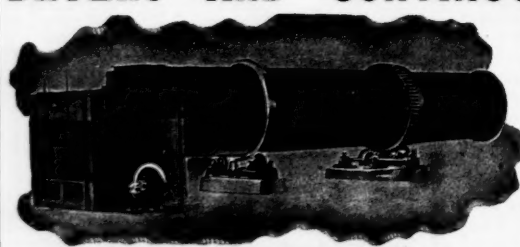
	Week ending Apr. 7.	Previous week.	Cor. week, 1922.
Armour & Co.	10,600	10,200	10,600
Anglo-Amer. Prov. Co.	4,700	6,500	7,000
Swift & Co.	13,800	10,500	8,000
G. H. Hammond & Co.	6,800	10,300	8,100
Morris & Co.	11,900	14,900	9,000
Wilson & Co.	10,300	12,200	5,700
Boyd-Lunham & Co.	5,000	6,300	5,000
Western Pkg. & Prov. Co.	11,900	14,000	10,800
Roberts & Oak	5,100	7,000	4,000
Miller & Hart	4,600	6,300	3,500
Independent Packing Co.	2,600	6,300	3,700
Brennan Packing Co.	6,200	5,300	5,400
Wm. Davies Co.	2,900	2,500	2,600
Agar Packing Co.	1,300	500	800
Others	8,700	9,900	8,000
Total	109,400	121,700	77,900

CHICAGO RETAIL FRESH MEATS

(Corrected weekly by C. W. Kaiser, Sec'y United Master Butchers' Ass'n of Chicago.)

Beef.			
	No. 1.	No. 2.	No. 3.
Rib roast, heavy end	30	28	20
Rib roast, light end	35	32	22
Chuck roast	20	18	14
Steaks, round	32	30	26
Steaks, sirloin, first cut	50	40	30
Steaks, porterhouse	70	50	30
Steaks, flank	25	22	15
Beef stew, chuck	18	15	14
Corned briskets, boneless	22	20	18
Corned plates	14	12	10
Corned rumps, boneless	25	22	18
Lamb.			
	Good.	Com.	
Hindquarters	35	25	
Legs	37	28	
Stews	15	15	
Chops, shoulder	30	28	
Chops, shoulder	28	26	
Mutton.			
Legs	22	..	
Stew	15	..	
Shoulders	20	..	
Chops, rib and loin	35	..	
Pork.			
Loins, whole, 8¢@10 avg.	19	@20	
Loins, whole, 10¢@12 avg.	18	@19	
Loins, whole, 12 to 14	17	@18	
Loins, whole, 14 and over	16	@17	
Chops	15	@16	
Shoulders	15	@16	
Butts	15	@16	
Spareribs	15	@16	
Hocks	14	@15	
Leaf lard, unrendered	11	@11	
Veal.			
Hindquarters	22	@20	
Forequarters	12	@16	
Legs	28	@28	
Breasts	12½	@16	
Shoulders	16	@22	
Outlets	16	@45	
Rib and loin chops	16	@58	
Butchers' Offal.			
Suet	..	@5	
Shops	..	@2	
Bones, per 100 lbs.	..	@50	
Calf skins	..	@15	
Kips	..	@14	
Deacons	..	@15	

DRYERS AND CONTINUOUS PRESSES



For Tankage, Blood, Bone Fertilizer, all Animal and Vegetable Matter. Installed in the largest packing-houses, fertilizer and fish reduction plants in the world. Material carried in stock for standard sizes.

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68 William St. . . . New York

EMIL KOHN, Inc. NEW YORK, N. Y.

Ship us a small Consignment and see how much better you can do. Results Talk! Information gladly furnished.

Calfskins

Office and Warehouse:
337 to 347 East 44th Street

CURING MATERIALS.

	Bbls.	Sacks.
Double refined saltpetre, gran.	6¼	6¼
Crystals	7¼	7¼
Double refined nitrate of soda, f. o. b. N. Y. & S. F., carloads	4¼	4¼
Less than carloads, granulated	4¼	4¼
Crystals	5¼	5¼
Kegs, 100@130 lbs., 1c more		
Boric acid, in carloads, powdered, in bbls.	11¼	11
Crystal to powdered, in bbls., in 5-ton lots or more	11¼	11¼
In bbls. in less than 5-ton lots	12	11¼
Borax, carloads, powdered, in bbls.	5¼	5¼
In ton lots, gran. or powdered, in bbls.	5¼	5¼
Sugar—		
Raw sugar, 96 basis, 3c Cuba duty paid	@7.50	
Second sugar, 90 basis	@6.75	
Syrup, testing 63 to 65 combined sucrose and invert	@24	
Standard, granulated, f. o. b. refinery (less 2 per cent.)	9.00@9.30	
Plantation, granulated, f. o. b. New Orleans (less 2 per cent.)	@8.75	
White clarified, f. o. b. New Orleans (net)	@8	
Yellow clarified, f. o. b. New Orleans (net)	@8¼	
Salt—		
Granulated, car lots, per ton, f. o. b. Chicago, bulk	\$9.80	
Kegs, car lots, per ton, f. o. b. Chicago, bulk	\$11.30	
Rock, car lots, per ton, f. o. b. Chicago	\$7.30	

April 7, 1923.

THE NATIONAL PROVISIONER

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CHICAGO MARKET PRICES

WHOLESALE FRESH MEATS.

Carcass Beef.

	Week ending April 7.	Cor. week, 1922.
Prime native steers.....	16 @17	15 @16
Good native steers.....	14 @15	14 @15
Medium steers.....	11 @13	12 @14
Halters, good.....	11 @16	11 1/2 @15
Cows.....	8 @11	8 @11 1/2
Heifers, choice.....	8 @12	8 @12
Find quarters, choice.....	8 @13	8 @10

Beef Cuts.

	Week ending April 7.	Cor. week, 1922.
Steer Loins, No. 1.....	28 @28	28 @30
Steer Loins, No. 2.....	24 @24	24 @28
Steer Short Loins, No. 1.....	35 @35	35 @39
Steer Short Loins, No. 2.....	32 @32	32 @36
Steer Loin Ends (hips).....	25 @25	25 @22
Steer Loin Ends, No. 2.....	24 @24	24 @21
Cow Loins.....	15 @20	15 @17
Cow Short Loins.....	20 @24	20 @26
Cow Loin Ends (hips).....	10 @16	10 @15
Steer Ribs, No. 1.....	23 @23	23 @22
Steer Ribs, No. 2.....	19 @19	19 @18
Cow Ribs, No. 1.....	16 @16	16 @17
Cow Ribs, No. 2.....	10 @10	10 @13
Steer Rounds, No. 1.....	15 @15	14 1/2 @14 1/2
Steer Rounds, No. 2.....	14 1/2 @14 1/2	14 @14
Steer Chunks, No. 1.....	10 1/2 @11 1/2	10 @10
Cow Rounds.....	11 1/2 @12 1/2	12 @13
Cow Chunks.....	8 @8 1/2	7 @7 1/2
Steer Plates.....	9 @9	9 @8
Medium Plates.....	9 @9	9 @7 1/2
Briskets, No. 1.....	12 @12	12 @12
Briskets, No. 2.....	7 @7	7 @5
Steer Navel Ends.....	6 @6	6 @4
Cow Navel Ends.....	4 1/2 @4 1/2	4 1/2 @4 1/2
Few Shanks.....	3 1/2 @3 1/2	3 1/2 @4
Hind Shanks.....	22 @22	18 @20
Rolls.....	55 @55	50 @50
Strip Loins, No. 1, boneless.....	45 @45	45 @45
Strip Loins, No. 2.....	14 @14	12 @12
Strip Loins, No. 3.....	30 @30	25 @25
Sirloin Butts, No. 1.....	26 @26	20 @20
Sirloin Butts, No. 2.....	17 @17	15 @15
Sirloin Butts, No. 3.....	70 @70	70 @70
Beef Tenderloins, No. 1.....	60 @60	60 @60
Beef Tenderloins, No. 2.....	18 @18	17 @17
Flank Steaks.....	17 @17	20 @20
Boneless Chunks.....	8 @8	9 @9
Shoulder Clods.....	13 @13	15 @15
Hanging Tenderloins.....	8 @8	8 @8
Trimnings.....	8 @8	8 @8

Beef Product.

Brains, per lb.....	9 1/2 @10	7 @10
Hearts.....	4 @5	3 @5
Tongues.....	29 @30	25 @30
Sweetbreads.....	39 @41	24 @28
Ox-Tail, per lb.....	9 @11	7 @10
Fresh Tripe, plain.....	4 @5	4 @4
Fresh tripe, H. C.....	4 @5 1/2	4 @5
Livers.....	9 @9 1/2	8 1/2 @10
Kidneys, per lb.....	6 1/2 @9	8 @8

Veal.

Choice Carcass.....	16 1/2 @17 1/2	15 @15 1/2
Good Carcass.....	11 @16	10 @14 1/2
Good Saddles.....	20 @28	22 @24
Good Backs.....	8 @10	10 @12
Medium Backs.....	6 @8	7 @8

Veal Product.

Brains, each.....	10 @11	8 @10
Sweetbreads.....	53 @62	54 @60
Calf Livers.....	28 @32	29 @35

Lamb.

Choice Lamb.....	24 @24	30 @31
Medium Lamb.....	23 @23	28 @29
Choice Saddles.....	30 @30	33 @33
Medium Saddles.....	29 @29	31 @31
Choice Fores.....	15 @15	24 @24
Medium Fores.....	15 @15	22 @24
Lamb Fries, per lb.....	26 @28	22 @24
Lamb Tongues, each.....	13 @13	18 @18
Lamb Kidneys, per lb.....	25 @25	25 @25

Mutton.

Heavy Sheep.....	12 @12	15 @15
Light Sheep.....	15 @15	20 @20
Heavy Saddles.....	14 @14	20 @20
Light Saddles.....	20 @24	24 @24
Heavy Fores.....	10 @10	10 @10
Light Fores.....	10 @10	10 @10
Mutton Legs.....	20 @20	27 @27
Mutton Loins.....	18 @18	22 @22
Mutton Stew.....	7 @7	10 @10
Sheep Tongues, each.....	13 @13	18 @18
Sheep Heads, each.....	10 @10	10 @10

Fresh Pork, Etc.

Dressed Hogs.....	15 @16	12 1/2 @12 1/2
Pork Loins, 8@10 lbs. avg.....	14 1/2 @14 1/2	23 1/2 @23 1/2
Leaf Lard.....	12 @12	11 @11
Tenderloin.....	6 @6	6 @6
Spare Ribs.....	8 @8	12 @12
Butts.....	12 @12	15 @15
Hocks.....	11 1/2 @11 1/2	10 1/2 @10 1/2
Trimnings.....	7 @7	17 @17
Extra lean trimmings.....	12 1/2 @12 1/2	15 @15
Tails.....	10 @10	9 @9
Snouts.....	5 @5	4 @4 1/2
Pigs' Feet.....	4 @4 1/2	7 @7
Pigs' Heads.....	5 @5	9 @9
Blade Bones.....	5 @5	11 1/2 @11 1/2
Blade Meat.....	6 @6	5 @5
Check Meat.....	5 @5 1/2	4 @4
Hog Livers, per lb.....	3 @3 1/2	3 @3 1/2
Neck Bones.....	11 @11	15 @15
Skinned Shoulders.....	4 @4	4 1/2 @4 1/2
Pork Hearts.....	5 @5	5 @5
Pork Kidneys, per lb.....	4 @4	9 @9
Pork Tongues.....	9 @9	9 @9
Slip Bones.....	9 @9	8 @8
Tail Bones.....	9 @9	10 @10
Brains.....	11 1/2 @11 1/2	12 1/2 @12 1/2
Back Fat.....	12 @12	14 @14
Hams.....	19 @19	24 @24
Calas.....	10 1/2 @10 1/2	10 1/2 @10 1/2
Bellies.....	19 @19	24 @24

DOMESTIC SAUSAGE.

Fancy pork sausage, in 1-lb. cartons.....	22 @22
Country style sausage, fresh, in link.....	15 @15
Country style sausage, smoked.....	17 @17
Mixed sausage, fresh.....	13 @13
Frankfurts in pork casings.....	15 @15
Frankfurts in sheep casings.....	15 @15
Bologna in beef bungs, choice.....	14 @14
Bologna in cloth, paraffined, choice.....	14 @14
Bologna in beef middles, choice.....	16 @16
Liver sausage in hog bungs.....	10 @10
Liver sausage in beef rounds.....	11 @11
Head cheese.....	22 @22
New England luncheon specialty.....	16 @16
Liberty luncheon specialty.....	14 @14
Mixed luncheon specialty.....	14 @14
Tongue sausage.....	14 @14
Blood sausage.....	14 @14
Polish sausage.....	14 @14
Souse.....	14 @14

DRY SAUSAGE.

Cervelat, choice, in hog bungs.....	47 @47
Cervelat, new condition, in hog bungs.....	15 @15
Cervelat, new condition, in beef middles.....	15 @15
Turkey Cervelat.....	20 @20
Farmer.....	23 @23
Holsteiner.....	21 @21
B. C. Salami, choice.....	42 @42
Milano Salami, choice, in hog bungs.....	41 @41
B. C. Salami, new condition.....	20 @20
Frisses, choice, in hog middles.....	37 @37
Genoa style Salami.....	51 @51
Peperoni.....	31 @31
Mortadella, new condition.....	19 @19
Capicola.....	39 @39
Italian style hams.....	37 @37
Virginia style hams.....	37 @37

SAUSAGE IN OIL.

Bologna style sausage in beef rounds—	
Small tins, 2 to crate.....	5.75
Large tins, 1 to crate.....	6.50
Frankfurt style sausage in sheep casings—	
Small tins, 2 to crate.....	7.00
Large tins, 1 to crate.....	8.00
Frankfurt style sausage in pork casings—	
Small tins, 2 to crate.....	6.50
Large tins, 1 to crate.....	7.50
Smoked link sausage in pork casings—	
Small tins, 2 to crate.....	6.00
Large tins, 1 to crate.....	7.00

SAUSAGE CASINGS.

(F. O. B. CHICAGO.)

Beef rounds, domestic, 150 sets, per tierce, per set.....	18
Beef rounds, export, 225 sets, per tierce, per set.....	22
Beef rounds, export, 140 sets, per tierce, per set.....	32
Beef middles, 110 sets, per tierce, per set.....	70
Beef bungs, No. 1, 400 pieces, per tierce, per piece.....	30
Beef bungs, No. 2, 400 pieces, per tierce, per piece.....	17 @20
Beef weasands, No. 1, per piece.....	17
Beef weasands, No. 2, per piece.....	08
Beef bladders, small, per doz.....	1.75
Beef bladders, medium, per doz.....	1.40
Beef bladders, large, per doz.....	1.25
Hog casings, medium, f. o. s.....	.90
Hog casings, narrow selected, 1 1/16" down, per lb., f. o. s.....	2.00
Hog casings, regular, 1 1/4" down, per lb., f. o. s.....	1.75
Hog casings, medium, 1 1/4" to 1 1/2" down, per lb., f. o. s.....	.90
Hog casings, wide, 1 1/4" to 1 1/2" down, per lb., f. o. s.....	.50
Hog casings, narrow selected, 1 1/16" and under 100 yds., per bbl.....	2.25
Hog casings, regular, 1 1/4" and under 100 yds., per bbl.....	2.00
Hog casings, medium, 1 1/4" to 1 1/2" and under 100 yds., per bbl.....	1.30
Hog casings, wide, 1 1/4" to 1 1/2" and under 100 yds., per bbl.....	.75
Hog casings, extra wide, 1 1/2" and over, per bbl.....	.75
Hog middles, with cap, per set.....	.16
Hog middles, without cap, per set.....	.14
Hog bungs, export.....	.21
Hog bungs, large prime.....	.14
Hog bungs, medium, per doz.....	.02
Hog bungs, narrow, no demand.....	.02
Hog stomachs, per piece.....	.05 1/2 @.06
Hog stomachs, linings, per piece.....	.01 1/2

VINEGAR PICKLED PRODUCTS.

Regular tripe, 200-lb. bbl.....	14.00
Honeycomb tripe, 200-lb. bbl.....	18.00
Pocket honeycomb tripe, 200-lb. bbl.....	18.00
Pork feet, 200-lb. bbl.....	15.50
Pork tongues, 200-lb. bbl.....	70.00
Lamb tongues, long cut, 200-lb. bbl.....	45.00
Lamb tongues, short cut, 200-lb. bbl.....	51.00

CANNED MEATS.

	No. 1/2.	No. 1.	No. 2.	No. 6.
Corned beef.....	\$ 2.35	\$ 4.00	\$13.00	
Roast beef.....	2.35	4.50	15.00	
Roast beef.....	2.40	4.75	16.50	
Sliced dried beef.....	2.50	4.50		
Ox tongue, whole.....		17.50	56.00	
Launch tongue.....	2.85	4.70	9.50	34.50
Corned beef hash.....	1.50	2.75	4.25	
Hamburger steaks with onions.....	1.50	2.25	4.25	
Vienna style sausage.....	1.15	2.25	4.15	
Veal loaf, medium size.....	2.00			
Chili con carne with, or without, beans.....		1.25		
Potted meats.....	.80			

BARRELED PORK AND BEEF.

Mess pork, regular.....	25.00
Family back pork, 20 to 34 pieces.....	25.00
Family back pork, 35 to 45 pieces.....	25.50
Clear back pork, 40 to 50 pieces.....	25.00
Clear back pork, 50 to 60 pieces.....	23.00
Clear plate pork, 20 to 35 pieces.....	20.00
Clear plate pork, 35 to 45 pieces.....	19.50
Bean pork.....	19.00
Brisket pork.....	22.00
Plate beef.....	20.00
Extra plate beef, 200-lb. barrels.....	20.00

BUTTERINE.

1 to 6, natural color, solids, f. o. b. Chicago.....	21 @21
Cartons, rolls or prints, 1-lb.....	22 @22
Cartons, rolls or prints, 2@5 lbs.....	21 1/2 @21 1/2
Shortenings, 30@60 lb. tubs.....	20 @20
Nut Margarine, prints, 1-lb.....	20 @20

DRY SALT MEATS.

Extra short clears.....	11 1/2 @11 1/2
Extra short ribs.....	11 1/2 @11 1/2
Short clear middles, 60-lb. avg.....	12 1/2 @12 1/2
Clear bellies, 14@16 lbs.....	12 1/2 @12 1/2
Clear bellies, 18@20 lbs.....	12 1/2 @12 1/2
Clear bellies, 20@25 lbs.....	12 @12
Clear bellies, 25@30 lbs.....	12 @12
Rib bellies, 20@25 lbs.....	12 @12
Clear bellies, 25@30 lbs.....	12 @12
Fat backs, 10@12 lbs.....	9 1/2 @9 1/2
Fat backs, 12@14 lbs.....	9 @9
Fat backs, 14@16 lbs.....	10 @10
Regular plates.....	8 @8
Butts.....	7 @7

WHOLESALE SMOKED MEATS.

Regular hams, fancy, 14@16 lbs.....	23 @23
Skinned hams, fancy, 16@18 lbs.....	24 1/2 @24 1/2
Standard regular hams, 12@16 lbs.....	23 @23
Picnics, 6@8 lbs.....	31 @31
Breakfast bacon, fancy, 6@8 lbs.....	24 1/2 @24 1/2
Standard bacon, 8@12 lbs.....	21 @21
Standard bacon, 12@14 lbs.....	20 1/2 @20 1/2
Standard bacon strips, 6@7 lbs.....	20 1/2 @20 1/2
Cooked hams, choice, skin on, surplus fat off, smoked.....	33 @33
Cooked hams, choice, skinned, surplus fat off, smoked.....	35 @35
Cooked hams, choice, skinned, surplus fat off, smoked.....	37 @37
Picnics, skin on, surplus fat off, smoked.....	19 @19
Picnics, skinned, surplus fat off, smoked.....	20 @20
Loin roll.....	40 @40

FERTILIZERS.

Ground dried blood.....	\$ 4.10 @ 4.25
Unground and crushed blood.....	3.75 @ 4.00
Hoofmeal.....	2.65 @ 2.75
Ground tankage, 10 to 11%.....	3.25 @ 3.35
Ground tankage, 8 1/2 to 9%.....	2.90 @ 3.15
Crushed and unground tankage.....	2.40 @ 2.80
Ground raw bone, per ton.....	32.00 @ 35.00
Ground steamed bone, per ton.....	23.00 @ 25.00
Unground steamed bone.....	18.00 @ 21.00
Unground bone tankage.....	16.00 @ 18.00

HORNS, HOOF AND BONES.

	Per ton.
No. 1 horns.....	\$250.00 @ 300.00
No. 2 horns.....	175.00 @ 225.00
No. 3 horns.....	100.00 @ 150.00
Hoofs, black and striped.....	45.00 @ 50.00
Hoofs, white.....	60.00 @ 75.00
Grinding hoofs.....	32.00 @ 34.00
Round shin bones, heavies.....	150.00 @ 160.00
Round shin bones, lights and med.....	125.00 @ 140.00
Flat shin bones, heavies.....	110.00 @ 120.00
Flat shin bones, lights and med.....	70.00 @ 100.00
Thigh bones, heavies.....	140.00 @ 150.00
Thigh bones, lights and med.....	125.00 @ 135.00
Buttock bones.....	65.00 @ 70.00
Skulls, jaws and knuckles.....	35.00 @ 40.00
Rejected mfg. bones.....	35.00 @ 60.00

Note—Foregoing horns, hoofs and bones must be assorted, free from grease spots and cracks, hard and clean, uniform as to cut and weight, packed in double bags and carload lots, also well and favorably known to foreign and domestic manufacturers.

LARD (Unrefined).

Prime, steam, cash, tierces.....	11.32
Prime, steam, loose.....	10.57
Leaf, raw.....	10.75
Neutral lard.....	13.50

LARD (Refined).

Pure lard, kettle rendered, per lb., tes.....	13 1/4 @ 13 1/4
Pure lard, tierces.....	12 1/2 @ 12 1/2
Compound.....	12 1/2 @ 13
Barrels, 1/2 over tierces; half barrels, 1/4 over tierces; tubs and pails, 10 to 80 lbs., 1/4 c to 1 c over tierces.....	

OLEO OIL AND STEARINE.

Oleo oil, extra.....	13 @ 13 1/4
Oleo stock.....	11 1/2 @ 12
Prime No. 1 oleo oil.....	11 1/4 @ 11 1/4
Prime No. 2 oleo stock.....	9 1/2 @ 10
No. 3 oleo oil.....	9 1/2 @ 10
Prime oleo stearine, edible.....	10 @ 10 1/4
No. 2 oleo stearine, edible.....	9 1/2 @ 10

Retail Section

QUALITY OF BEEF AND HOW TO TELL IT

Tips for Meat Retailers Who Want to Buy Right

By Emil Hirsh.

Variations in the quality of carcass beef that the meat retailer buys and how to judge these accurately are of great importance to the retailer who wants to operate an efficient market. The good points of strictly finished fed beef are not enough to be familiar with, because that constitutes only a very small proportion of the total consumption of beef. The retailer has to know about the beef that has no quality at all just as much as he does about the best beef on the market.

All these matters of such practical value to the retailer were explained in a clear and interesting way in a recent lecture by Emil Hirsh in the series that he is giving for the meat retailers' school at Milwaukee. Previous lectures have been printed in THE NATIONAL PROVISIONER and many favorable comments have been made on them. This lecture on the "Quality of Other Grades of Carcass Beef" is as follows:

The demands and requirements of the consumers of beef vary greatly in various parts of the United States and in various sections of every city and even so in different parts of the city of Milwaukee, according to the whims and tastes of the many people that make up the total population of the city. As previously mentioned to you, therefore, these many different requirements of the consumers reflect themselves into the demands of the retail marketmen through the packer, finally upon the producer and feeder of live cattle. They in turn use their experience in line with their ability to gauge the demands of the consumer by getting ready for the market cattle of such weights and quality as are mostly in demand, and which will gain them the most profitable results.

Of course, different producers and feeders of beef cattle have different opinions and different methods of procedure, with the result that different classes of cattle in their various and many stages of finish come to the livestock markets, where they are judged and bought by experienced cattle buyers, for such points of usefulness and merit as these buyers figure they have. As a result of these various methods of feeding operations, and also as a result of how well individual cattle may do in the feed lots, many variations of quality of beef cattle make their appearance in the beef coolers for the selection of the retail marketman.

Must Know Quality of Beef.

It is, therefore, essential to a successful retail marketman, as it is to every merchant, who must know the merchandise he deals in, to be thoroughly posted to judge the various grades and classes of beef and the quality thereof. But it is not sufficient for you to know only the good points of strictly finished, fed beef of the three most prominent types previously mentioned to you, as that class of beef is, after all, only a small proportion of the total consumption of beef. Beef will range in quality from the types demonstrated to you in their various stages of finish to a point where cattle may not have any finish whatever, and still such cattle

find a ready market by such dealers whose trade requirements are for lower costing, even though of poorer quality of beef.

When we speak of finished beef we have before us a type of cattle that have had special care and feed for such a period of time as is necessary to bring the animals to the expected standard of weights and quality desired. This period of feeding usually ranges from four months to a year or more.

As demonstrated to you also with the load of Angus yearling cattle bought at the International Livestock Exposition, there are numerous cattle fed by experienced feeders for a period of four months or even less than four months, such cattle being called "short-feds." The quality of such beef will vary from medium to good, and will suit the average consumer, who wants medium to good quality of beef cuts at a more reasonable price than those of the longer fed and finished higher cost beef.

Beef Quality of Grass Cattle.

In addition there are numerous cattle that fill a useful purpose as beef cattle that never had any special care or feed, except what grass they were able to pick up in the field or pasture, such cattle being termed "grass cattle." The proportion of grass cattle compared in numbers with fed and finished cattle sent to the livestock markets varies at different seasons of the year, starting usually early in the summer, first in the southern parts of the country and gradually traveling northward as the season advances and as grass becomes more plentiful.

Early in the season the beef produced from these grass cattle is quite inferior and usually unsatisfactory, but as the season advances and the grass contains more substance, the quality improves and the beef quickly reflects this improvement. Still later in the season, when grass becomes abundant in the Western States, we obtain a number of beef cattle that are comparatively fat, without having had any special care or special feed. Such cattle are termed Western or "range" cattle, and in the past have been a source of a liberal supply of cattle of considerable quality, and of a comparable reasonable cost to the consumer, but these cattle are becoming less numerous from year to year with the passing of the Western ranches and their splitting up into smaller tracts or farms.

Classes of Beef Cattle.

In summing up, we find the following classes of beef cattle:

- 1—Long fed cattle.
- 2—Short fed cattle.
- 3—Grass cattle.
- 4—Western cattle.

These four classes can be subdivided into many other classes, almost as numerous as the cattle themselves, according to weights, kinds and quality.

For the purpose of our lesson we will subdivide these as follows:

- A—Native cattle, steers and heifers.
- B—Native yearling cattle, steers and heifers.
- C—Native grass cattle, steers and heifers.
- D—Texas cattle.
- E—Western cattle, steers and heifers.
- F—Native cows.
- G—Western cows.

The percentage of cuts from the lesser finished carcasses of beef are practically the same as those of the higher type beef. There may be a slight variation and lesser percentage in primal cuts such as ribs and loins, but such variation is only fractional. In order to determine what is most profitable for you to handle from all points of view, make tests as often as the opportunity presents itself, or as often as you are in doubt as to which would be most advantageous for you to handle.

At your next visit to our plant we will demonstrate to you as far as possible the various qualities, weights and characteristics of the numerous classes and subdivision of classes herein enumerated to you.

At some future lesson we intend to take up with you the subject on dairy or dual purpose beef cattle.

COUNCIL HOLDS CUTTING TESTS.

At a recent meat cutting demonstration held at the University of California Farm at Davis, near Sacramento, some very interesting figures were obtained which will be of service to meat retailers everywhere.

The demonstration was conducted by R. W. Weiss, president of the meat council, and L. F. Armknecht, president of the San Francisco Butchers' Board of Trade, at the invitation of the director of the farm. Accompanying Messrs. Weiss and Armknecht were D. J. Murray, secretary of the San Francisco Butchers' Board of Trade, A. Shapro, a prominent market street retailer and member of the executive committee of the meat council, and Ernest Schaeffle, manager of the Meat Council of Northern California. The tests were as follows:

Animal	Carcass	
	No. 1.	No. 2.
Breed	†	**
Age, mos.	16	33
Live weight, lbs.	907	935
Dressed weight, lbs.	530	432
Dressing, per cent.	58.4	46.2
Weight of head	27.0	26.0
Weight of hide	74.0	62.0
Weight of offal	170.0	134.0
	Weight, lbs.	Weight, lbs.
Shin and shoulder	27.5	25.5
Cross ribs	13.5	10
Shin soup	13.5	15
Plate	36.0	27.0
Brisket (bone)	15	13
Navel	13	9
Short ribs	8	5.5
Prime ribs	32	23
Chuck rib roast	35	29
Neck	13	12
Loin	46	32
Sirloin	23	20
Short loin	23	12
Round	69	64
Bone	6	6.5
Sirloin butt	8	6
Rump	17	11
Heel	7	6
Shank	9	9
Round steak	24	25.5
Miscellaneous:		
Flank steak and fat	6	2
Kidney	1	.75
Kidney suet	1.5	1.0
Trim		2.0

†Top good steer.

*Low medium steer.

††Aberdeen Angus.

**Grade.

DISPOSING OF HAM ENDS.

How to dispose of ham ends is a subject that is of interest to meat retailers and was demonstrated recently in a way that is useful to retailers in many places. At a recent meeting of the Toledo meat council J. B. Dolson gave a blackboard demonstration by showing how he disposes of the ham ends with the following recipe:

7 lbs. boiled ham ends—ground.
12 sweet pickles.
14c can pimentos.
8 oz. jar mayonnaise dressing.
If too dry when mixed add a little more salad dressing.

CLEVELAND'S RETAIL ACCOUNTING.

The Cleveland Meat Council has made arrangements for a meeting for retail meat dealers for the purpose of introducing a standard system of bookkeeping for the retailer.

The system has been developed and perfected by the Northwestern University of Chicago, with the assistance and approval of the U. S. Department of Agriculture.

The National Association of Meat Councils is sponsoring the movement and they have acquired the services of men thoroughly equipped to introduce the uniform accounting system in the various cities which have meat councils.

On Monday evening, April 9, Professor Horace Secrist, director of the Bureau of Business Research, Northwestern University School of Commerce, will address the meeting at Moose Hall, which has been secured through the courtesy of the Cleveland Retail Meat Dealers' Association. He will explain this standard bookkeeping system, and Mr. Paul E. Newey of his staff will be on hand prepared to start the work of instruction and installation. Approximately twenty-five Cleveland retailers will be granted the immediate opportunity of receiving instruction and having the system put into effect in their establishments.

While the first group will consist of only twenty-five retailers, second and third groups will be taken on until the whole field of those desiring the system has been covered.

ROCHESTER RAISED MEAT FUNDS.

The success of the subscription drive to put Rochester on the map in the great meat economy campaign movement speaks well for the intelligence and progressiveness of the Rochester meat retailers. R. M. Wheeler, organizer of the campaign, declared that no city heretofore had responded with so much immediate enthusiasm as Rochester.

Several meat retailers were so inspired with enthusiasm that they left their markets to accompany Mr. Wheeler on his calls on fellow butchers and help him get their subscriptions. Albert F. Walker, vice-president of the Meat Council of Rochester, generously placed his car at Mr. Wheeler's disposal and personally drove him from market to market for four days in a stretch. The last couple of days of the campaign Wm. M. Stickel, president of the Rochester Master Butchers' Association, joined actively in the drive.

Within a week the necessary funds had been subscribed to pay for the great educational meat campaign which will run for six months in the Rochester Democrat & Chronicle. It is especially remarkable that such gratifying results had been achieved in Rochester without any special meeting of either the meat council as the master butchers, or any other preparation.

OKLAHOMA RETAILERS TO CONVENE.

The state convention of the Oklahoma Meat Dealers' Association will be held Wednesday and Thursday at Oklahoma City, April 18 and 19. The call by Vice-President, C. J. Perry, in a bulletin, urges the butchers of the state to "make arrangements now to come and bring along



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the good wife or sweetheart, and exchange ideas with the livest bunch of real fellows you ever met. Mr. Meat Dealer, your competitors. Why not get better acquainted? Put in and take out all that you can. In this way only can our organization be what we would have it."

LOCAL AND PERSONAL.

R. J. Keesey has opened a meat market at Canton, O.

T. J. Scharfenberg will open a new meat market at Galesburg, Ill.

Hall & Richardson, Perry, N. Y., will shortly erect a new meat market.

Howard & Small have engaged in the meat business at Reed City, Mich.

The Tokay meat market has been opened at 25 South School Street, Lodi, Cal.

The Visant Grocery, Pawnee, Nebr., has added a meat market to its business.

The meat market of Kelley & Son, Monroe, Nebr., has been destroyed by fire.

W. C. Weber has bought the meat market of Oliver Brothers, Bradford, Tenn.

H. A. Ferguson will soon sell a meat market to Wm. Haupt at Davenport, Ia.

Delyle Gilman has bought the meat market of Elmer Larson at Plymouth, Wis.

The Quality Meat Shop, 125 North 5th Street, Springfield, Ill., has been opened.

M. C. Saunders has succeeded to the market of Baichtal & Saunders, Sac City, Ia.

L. R. Summerfield, Puyallup, Wash., has bought the meat market of William Kelley.

The meat market of Edward Allen, Braintree, Mass., was recently damaged by fire.

H. E. Ward, Wymore, Nebr., has moved his meat market here from Belleville, Kans.

Luther Gray, Callaway, Nebr., has succeeded to the meat business of Sadler & Gray.

P. E. Law, Alliance, Nebr., has purchased the Third Street Market from W. F. Broich.

A new meat market has been opened on Arlington avenue, New Castle, Pa., by C. P. Craig.

East End Meat Market, 15th and Jacob streets, Wheeling, W. Va., has been opened recently.

W. H. Frazier has purchased the East Side Meat Market, York, Nebr., from W. W. Moomey.

S. Caseb's meat market at 307 Alamo

For Sausage Makers

BELL'S

Patent Parchment Lined

SAUSAGE BAGS

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SAUSAGE SEASONINGS

For Samples and Prices, write

THE WM. G. BELL CO.
BOSTON MASS.

Plaza, San Antonio, Tex., has recently been opened.

The Royal Meat Market, Sioux Falls, S. D., has been opened at Seventh and Main streets.

W. F. Ralford, Thomasville, Ga., has opened a new meat market at 209 West Jackson street.

Robert C. Moore has purchased the Colonial Meat Market, 117 W. 10th Street, Sioux Falls, S. D.

T. M. Judd has opened a meat market at 510-A North Taylor Street, Marillo, Tex., and will remodel it.

The Nelson Beef Co., Poughkeepsie, N. Y., will shortly open a new meat market at 387 Main Street.

The La Crosse Meat Co., Endicott, Wash., has taken over the Endicott Cold Storage Meat Market.

Kelley & Johnston, Beaver City, Nebr., have been succeeded in the meat and grocery business by W. T. Kelley.

The Independent Meat Co. of Yakima, has purchased the City Meat Market of Hagerman & Son, Sunnyside, Wash.

John I. Amy, formerly of Greenville, Pa., and Hiram Cozadd have leased the store building at Plum street and opened a meat market.

Jos. Altan has sold his grocery and meat market, West Seventh Ave., Tarentum, Pa., to Durana & Pracko and opened up a grocery and meat market at 52 Chestnut Street, Natrona.

New York Section

P. D. Armour, vice-president, Armour & Company, Chicago, is visiting in New York.

A. H. Ruff, construction department, The Cudahy Packing Co., Chicago, is a visitor to the city.

C. H. Brady, branch house department, Swift & Company, New York, is visiting Chicago this week.

Thomas E. Wilson, president, and J. Moog, vice-president, Wilson & Company, were in New York this week.

E. A. Tamblin, beef department, and H. E. Hemingway, branch house provision department, Swift & Company, Chicago, are in New York.

W. F. Price, branch house manager, and A. E. Osborne, head of the accounting department, Morris & Company, Chicago, were in New York this week.

The Wilson Fellowship Club will have a package party for the Wilson employees at 816 First avenue on Tuesday evening, April 10. There will be a buffet luncheon and dancing.

G. V. Brecht, president of The Brecht Company of St. Louis and New York, returned recently from a visit of several months to South America where his company has extensive interests.

P. D. Armour of Armour & Company and W. F. Price of Morris & Company spoke to the Armour and Morris men at a smoker given for the purpose of welcoming the Morris men into the Armour organization.

Prices realized on Swift & Company's sales of carcass beef in New York City for the week ending March 31, 1923, on shipments sold out, ranged from 9 cents to 15.50 cents per pound, and averaged 13.79 cents per pound.

The First National Bank of Tenafly, N. J., opened its handsome new banking house at Railroad and West Clinton avenues on Saturday, April 7. The president of this bank is Weller H. Noyes, chairman of the Manhattan Sanitary Inspection Association, and former vice-president of Swift & Company of New York.

This is to remind the members of the United Master Butchers of America of Greater New York to tell their ladies that the next meeting of the Ladies' Auxiliary will be held in the meeting rooms of Ye Olde New York branch, 250 West 57th street on Wednesday, April 11, 2 p. m. Coffee and cake will be served.

R. Arndt, with the assistance of George Kramer, has accepted the chairmanship of the retail meat dealers' division in the forthcoming campaign for \$500,000 for Salvation Army work in Greater New York. Mr. Arndt has surrounded himself with an energetic committee through which the firms, employees and individuals in the retail meat trade will make their contributions.

Messrs. Arndt and Kramer are particularly interested in this campaign because it is strictly a home affair. Not a penny of the money is to be sent outside the city. It will interest friends of the Salvation Army to know that in addition to the familiar slogan, "A man may be down but he's

never out," the central committee has adopted the line, "Father Knickerbocker's best friend," as indicating the value of the army's work to Greater New York.

The campaign will be launched May 1, but the task of organizing committees has been in progress for several weeks.

The following is a report of the New York City Health Department of the number of pounds of meat, fish, poultry and game seized and destroyed in the city of New York during the week ending March 31, 1923: Meat—Manhattan, 274½ lbs.; Brooklyn, 10 lbs.; Queens, 1 lb.; Richmond, 150 lbs.; total, 435½ lbs. Fish—Manhattan, 2½ lbs.; Brooklyn, 7 lbs.; total, 9½ lbs.

YE OLDE NEW YORK BRANCH MEETS.

The meeting of Ye Olde New York branch, United Master Butchers of America, held on last Tuesday evening, was probably one of the largest this branch has had in some time. The greater part of the evening was devoted to the study of the new bookkeeping system. Mr. Buchanan of the U. S. Bureau of Agricultural Economics spoke at length on the subject, demonstrating on the blackboard, and outlining the advantages in such a manner as to cause those present to see the simplicity of the method. About forty installations have been made and there are thirty or forty on the waiting list. It seems doubtful if the supply will meet the demand as there is only a limited number.

Some time ago this branch wrote to the commercial banks and the American Bankers' Association requesting that the banks remain open on Saturday evenings until 9 o'clock in order to give the butchers an opportunity to deposit the day's receipts. The branch is now informed that this subject will have to be taken up with the New York Clearing House Association and as the burglaries of butcher shops have not ceased, the master butchers will push the matter in order to protect its members.

The ball committee made its final report, showing a very substantial balance after all expenses were paid.

The committee which had been appointed some time ago to gather information on compensation insurance made its final report to the effect that questionnaires and personal interviews proved conclusively that compensation insurance by a mutual company would be favorably received by the members in Greater New York. As the work of this committee is practically concluded, the various branches in this section have been requested to appoint two members on a tentative board for the final formation. Ye Olde New York branch appointed its president, George Kramer, and Past President A. F. Grimm.

Application for membership and initiation of new members show the branch to be in a healthy condition.

The proposal of the Meat Council to have a series of lectures, instructive and helpful to the retailer, was favorably received.

Word was received that the Mandelbaum bill was to be introduced into the New York assembly on Wednesday and a request was made that two members be appointed to go to Albany and protest the passage of this obnoxious bill. L. Goldstein and L. Goldsmith were appointed.

WHOLESALE DRESSED MEAT PRICES.

Wholesale prices of Western dressed fresh meats were quoted by the U. S. Bureau of Agricultural Economics at Chicago and three Eastern markets on Thursday, April 5, 1923, as follows:

	CHICAGO.	BOSTON.	NEW YORK.	PHILA.
Fresh Beef—				
STEERS:				
Choice	\$16.00@17.00	\$14.00@	\$15.00@15.50	\$14.50@15.50
Good	14.50@15.50	13.00@13.50	13.50@14.50	13.50@14.00
Medium	13.00@14.00	12.00@12.50	13.00@13.50	13.00@13.50
Common	11.00@12.00	11.00@12.00	12.50@13.00	12.00@13.00
COWS:				
Good	11.00@12.00	11.50@12.00	11.00@12.00	11.00@12.00
Medium	9.00@10.00	10.00@11.00	10.00@11.00	10.00@11.00
Common	8.50@ 9.00	@	9.00@10.00	@
BULLS:				
Good	@	@	@	@
Medium	@	@	@	@
Common	8.25@ 8.50	@	@	@
Fresh Veal—				
Choice	16.00@17.00	@	17.00@19.00	@
Good	15.00@16.00	@	15.00@17.00	17.00@
Medium	14.00@15.00	12.00@13.00	14.00@15.00	15.00@16.00
Common	11.00@13.00	10.00@11.00	10.00@13.00	10.00@14.00
Fresh Lamb and Mutton—				
LAMB:				
Spring	28.00@30.00	26.00@29.00	27.00@28.00	25.00@28.00
Choice	24.00@25.00	24.00@26.00	24.00@25.00	22.00@24.00
Good	22.00@23.00	22.00@24.00	23.00@24.00	20.00@22.00
Medium	18.00@20.00	20.00@22.00	22.00@23.00	18.00@20.00
Common	16.00@18.00	18.00@20.00	20.00@21.00	@
YEARLINGS:				
Good	@	@	18.00@20.00	16.00@18.00
Medium	@	@	@	@
Common	@	@	@	@
MUTTON:				
Good	13.00@14.00	14.00@15.00	14.50@15.50	@
Medium	10.00@12.00	12.00@13.00	13.50@14.00	14.00@15.00
Common	8.00@ 9.00	@	10.50@12.50	12.00@13.00
Fresh Pork Cuts—				
LOINS:				
8-10 lb. average	14.00@15.00	15.50@16.50	15.00@16.50	15.00@17.00
10-12 lb. average	13.00@14.00	14.50@15.00	14.00@15.00	14.00@16.00
12-14 lb. average	12.00@13.00	13.50@14.00	13.00@14.00	13.50@15.00
14-16 lb. average	11.50@12.00	12.00@13.00	12.50@13.50	13.00@13.50
16 lb. over	11.00@11.50	11.50@12.00	12.00@13.00	12.00@13.00
SHOULDERS:				
Skinned	11.00@12.00	@	12.00@13.00	11.00@13.00
PICNICS:				
4-6 lb. average	10.00@11.00	11.00@12.00	10.00@11.00	@
6-8 lb. average	9.00@10.00	10.00@11.00	9.00@10.00	@
BUTTS:				
Boston style	12.00@13.00	@	13.00@15.00	13.00@15.00

*Veal prices include "hide on" at Chicago and New York.

SHAHER SQUEAL CLUB CELEBRATES.

Two hundred and fifty of the employees of the meat packing firm of Shafer & Company gathered at the plant on Lombard street, Baltimore, on Monday, April 2, for the first dance and frolic of the Squeal Club, the good fellowship name of the sales organization. The arrangements for the frolic, so complete in every detail, were made by the following able committee, consisting of W. Edward Allers, chairman; Henry Heintzman, Charles Haefner, John A. Brown, Theo. C. Giese. The part of the plant turned over to the employees for the frolic was very elaborately decorated with palms and flowers and highly colored draperies, which gave every evidence of a big time for all, and when the evening waxed warm the distribution of a dozen different merry-making novelties added fun to the occasion.

In addition to the employees and their families, the following officers were present and joined earnestly in the evening's fun: Mr. Howard R. Smith, president; Mr. W. K. Snyder, vice president; Mr. J. Fred Shafer, vice president and treasurer; Mr. E. G. Cover, chairman of the board.

Speech-making was barred except for one brief but invigorating address by President Smith, which was accorded great applause by those present.

The organization at Shafer & Company under the direction of its president, Mr. Howard R. Smith, has taken on vigorous new life. A full-fledged bowling league has been formed, consisting of twelve teams; a completely uniformed baseball club has been organized for the coming season and periodical dances are being arranged under the auspices of the Squeal Club. The officers of the Squeal Club are: Ralph T. Wheatley, president; Jos. A. Bosse, treasurer; S. S. Hamilton, secretary.

EASTERN MEAT TRADE CONDITIONS.

Meat trade conditions for the week at New York, Philadelphia and Boston are reviewed by the United States Bureau of Agricultural Economics as follows:

Lack of demand was largely responsible for the weak to lower prices which prevailed on most classes of fresh meat this week. Mutton was an exception due to abnormally light receipts. Receipts of beef, veal and lambs were fairly liberal and pork moderate.

Steer receipts were largely of medium and good grade with a narrow price spread between choice and common on account of the scarcity of the latter. More good and choice heavy steers were offered at New York than for some time. Cow receipts were light and sold fairly readily due in part to the absence of low-priced steers. The supply of bull was also light. The market ruling about steady. Boneless western bull meat at New York sold for next week's arrival at \$9.50 to \$10.50. Trading in kosher beef was light due to the Jewish holidays, but prices remained steady to firm. Hinds and ribs at New York were firm to one dollar higher.

Prices on good and choice grades of veal declined sharply during the week at New York and to a less extent on heavy grass carcasses, which were not plentiful. Good grade comprised the bulk of milked veal at that market. Prices at other markets were about steady, although some concessions were made late in the week. Frozen veal at New York sold mostly from \$8.50 to \$10.

Receipts of spring lamb were light, but buyers were indifferent and prices dropped sharply from last week's level. The market on older lambs was also

weak, although prices showed less decline. Receipts were liberal and demand slow. Frozen Argentine lambs at New York sold around \$18 under a light supply.

Prices on mutton were steady to strong due to light receipts and fair demand. Quality was only fair with comparatively few carcasses showing the most desirable weights and finish. Frozen Argentine mutton brought \$14 at New York.

The pork market was weak with prices ruling very uneven. Sales of large lots were made at concessions of \$1 to \$1.50 below the general market. Receipts were considerably in excess of the demand. Light loins and butts showed greatest weakness, although declines were general.

Boston is closing weak on most classes. There will be a carry over of pork and little beef. Other classes will be cleaned up. A considerable amount of beef will be carried on storage rail. New York is closing steady on cows, steady to firm on mutton, barely steady on lambs, weak on steers, veal and pork cuts. Some beef may be carried, some pork will be frozen. Philadelphia is closing weak on steers, veal, lambs and pork, steady on cows and mutton. Most classes will be cleaned.

LIVE STOCK IN SOUTH AMERICA.

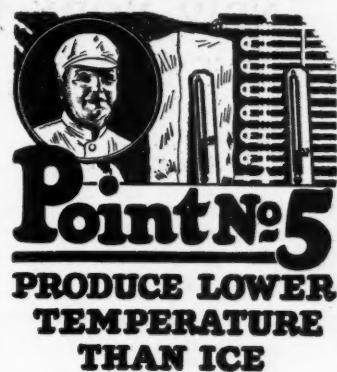
North American breeders and exporters of pure bred live stock will find much of interest to them in The Live-Stock Industry in South America, recently issued by the U. S. Department of Agriculture as Department Circular 228. The information contained in the circular was obtained at first hand by L. B. Burk and E. Z. Russell, representatives of the department who spent several months during 1920 investigating live-stock conditions in Argentina, Uruguay, Brazil, and Chile. A separate report is made on conditions in each of these four countries, attention being given to beef cattle, hogs, sheep, horses, and dairying.

In South America the growing of high-class live stock has been most highly developed in Argentina, which is one of the leading grain, cattle, and sheep countries of the world. Few Argentine farmers grow hogs, but the mild climate and long growing season, together with the abundance of corn and alfalfa, furnish very good conditions for economical pork production, and it is believed that the industry will expand within the next few years and that eventually a much larger percentage of the corn crop will be marketed on the hoof. The growing of more hogs should result in a demand for more breeding animals from the United States.

Uruguay, a country about the size of Missouri, differs greatly from Argentina in having a soil closely underlaid with rock and in a lack of rainfall at the proper time. For these reasons and because of the ravages of grasshoppers, corn is an uncertain crop and it is doubtful if hog raising will ever develop to any great extent. Excellent grazing is found however and cattle and sheep raising are the principal industries. On some ranches it is estimated that the wool clip, lamb crop, and increase in weight of the wethers, practically pay the running expenses of the ranches leaving returns from the cattle operations as net profit. Cattle and sheep are pastured together.

Better Livestock For Brazil.

Brazil, although it is about the size of the United States, has very few breeders of pure bred live stock. However, there is an increasing interest in better bred animals. Many of the larger coffee plantation owners are raising live stock and some of them are beginning to establish



It takes just a little arithmetic to figure why mechanical refrigeration is best for a butcher or a grocer who wishes to keep meats, fish, and other food products in first class, salable condition.

The lowest possible temperature with ice is around 42 degrees Fahrenheit. With mechanical refrigeration your box can be kept at from 32 to 35 degrees Fahrenheit.

Now get this: A government report showed that milk increased its bacteria count 388 per cent in twenty-four hours at 42 degrees. In ninety-six hours the count increased 13,300 per cent. While at 32 degrees the count decreased ten per cent in twenty-four hours, and twenty per cent in ninety-six hours.

I realize that the butchers and grocers do not sell very much milk or cream. But the above example only goes to show the wonderful effect the correct low temperature has in keeping products fresh.

Yours truly,

Market Joe

Baker Ice Machine Co., Inc., Omaha, Nebr.
Gentlemen:

Please send me your bulletin 42D. We may install mechanical refrigeration about 19.....

Name

Street

City..... State.....

BAKER SYSTEM
REFRIGERATION

herds of pure bred cattle and hogs. There is much room for improvement in cattle and hogs which are said to resemble the native types of southern and eastern Texas. The Zebu, an East Indian breed of cattle, resistant to the fever tick is used to give hardness to the foundation stock, but imported bulls from the United States and other countries will be used to improve the type.

The investigators believe it will be some time before hogs will be imported from the United States in very great numbers, but there is now some demand for hogs of fairly good quality. If the Brazilian breeder can be assured of good results, it is believed that he will be willing to pay very good prices for North American cattle.

The circular gives many other suggestions for American exporters of live stock to these countries, including the approximate dates of the important shows, popularity of the different breeds, diseases and pests to be encountered, and buying habits of breeders.

NEW YORK MARKET PRICES

LIVE CATTLE.

Steers, ordinary to prime.....	7.50@16.30
Cows, common to choice.....	1.75@ 5.50
Bulls, common to choice.....	4.00@ 6.40

LIVE CALVES.

Calves, veal, prime, per 100 lbs.....	16.75@17.00
Calves, veals, common to medium.....	11.00@15.25
Calves, veals, culls, per 100 lbs.....	7.00@10.00

LIVE SHEEP AND LAMBS.

Lambs, prime, 100 lbs.....	15.75@16.00
Sheep, ewes, prime, 100 lbs.....	7.25@ 7.50
Sheep, ewes, common to good, per 100 lbs.....	4.50@ 7.00

LIVE HOGS.

Hogs, heavy.....	8% @ 9
Hogs, medium.....	9% @ 9 1/2
Hogs, 140 lbs.....	9 1/4 @ 9 1/2
Pigs, under 70 lbs.....	8% @ 9
Roughs.....	7 @ 7 1/2

DRESSED BEEF.

CITY DRESSED.

Choice, native, heavy.....	16 1/2 @ 17 1/2
Choice, native, light.....	17 @ 17 1/2
Native, common to fair.....	14 1/2 @ 16

WESTERN DRESSED BEEF.

Native steers, 600@800 lbs.....	15 @ 16
Native choice yearlings, 400@600 lbs.....	15 @ 16
Western steers, 600@800 lbs.....	13 @ 14
Texas steers, 400@600 lbs.....	11 @ 12
Good to choice heifers.....	14 @ 15
Choice cows.....	11 @ 12
Common to fair cows.....	10 @ 11
Fresh bologna bulls.....	8 @ 8 1/2

BEEF CUTS.

	Western.	City.
No. 1 ribs.....	@ 20	22 @ 24
No. 2 ribs.....	@ 17	19 @ 21
No. 3 ribs.....	@ 14	16 @ 18
No. 1 loins.....	@ 24	26 @ 28
No. 2 loins.....	@ 18	22 @ 25
No. 3 loins.....	@ 14	18 @ 21
No. 1 hinds and ribs.....	23 @ 24	18 1/2 @ 22
No. 2 hinds and ribs.....	16 @ 18	17 @ 18
No. 3 hinds and ribs.....	10 @ 12	15 1/2 @ 16 1/2
No. 1 rounds.....	@ 13	@ 13
No. 2 rounds.....	@ 12	@ 12
No. 3 rounds.....	@ 10	10 @ 11
No. 1 chucks.....	@ 11	@ 13
No. 2 chucks.....	@ 9	11 @ 12
No. 3 chucks.....	@ 7	9 @ 10
Bolognas.....	@ 6	9 1/2 @ 11
Bolla, reg., 665 lbs. avg.....	22 @ 23	
Bolla, reg., 426 lbs. avg.....	17 @ 18	
Tenderloins, 426 lbs. avg.....	00 @ 70	
Tenderloins, 526 lbs. avg.....	80 @ 90	
Shoulder clods.....	10 @ 11	

DRESSED CALVES.

Veals, city dressed, good to prime, per lb.....	@ 30
Veals, country dressed, per lb.....	@ 23
Western calves, choice.....	@ 24
Western calves, fair to good.....	@ 21
Grassers and buttermilks.....	@ 15

DRESSED HOGS.

Hogs, heavy.....	@ 13%
Hogs, 180 lbs.....	@ 13%
Hogs, 160 lbs.....	@ 13%
Hogs, 140 lbs.....	@ 14
Pigs, 80 lbs.....	@ 14

DRESSED SHEEP AND LAMBS.

Lambs, 8@10 lbs. avg.....	25 @ 26
Lambs, poor to good.....	19 @ 24
Sheep, choice.....	14 @ 16
Sheep, medium to good.....	11 @ 13
Sheep, culls.....	8 @ 10

SMOKED MEATS.

Hams, 8@10 lbs. avg.....	22 @ 23
Hams, 10@12 lbs. avg.....	21 @ 22
Hams, 12@14 lbs. avg.....	21 @ 22
Picnics, 4@6 lbs. avg.....	14 @ 15
Picnics, 6@8 lbs. avg.....	14 @ 15
Rowlettes, 6@8 lbs. avg., per lb.....	17 @ 18
Beef tongues, light.....	35 @ 40
Beef tongues, heavy.....	43 @ 45
Bacon, boneless, Western.....	22 @ 23
Bacon, boneless, city.....	22 @ 23
Pickled bellies, 10@12 lbs. avg.....	18 @ 19

FRESH PORK CUTS.

Fresh pork loins, Western, 10@12 lbs. avg.....	@ 17
Fresh pork tenderloins.....	@ 55
Frozen pork loins, 10@12 lbs. avg.....	@ 15
Frozen pork tenderloins.....	@ 40
Shoulders, city, 10@12 lbs. avg.....	@ 17
Shoulders, Western, 10@12 lbs. avg.....	@ 14
Butts, boneless, Western.....	@ 19
Butts, regular, Western.....	@ 15
Fresh hams, city, 8@10 lbs. avg.....	@ 22
Fresh hams, Western, 10@12 lbs. avg.....	@ 21
Fresh picnic hams, Western, 6@8 lbs. avg.....	@ 12
Extra lean pork trimmings.....	@ 16
Regular pork trimmings, 50% lean.....	8 @ 9
Fresh spare ribs.....	@ 12
Raw leaf lard.....	@ 13

BONES, HOOFS AND HORNS.

Round shin bones, avg. 48 to 50 lbs., per 100 pcs.....	150.00@175.00
Flat shin bones, avg. 40 to 45 lbs., per 100 pcs.....	110.00@120.00
Black hooft, per ton.....	70.00@ 75.00
Striped hooft, per ton.....	70.00@ 75.00
White hooft, per ton.....	105.00@115.00
Thigh bones, avg. 85 to 90 lbs., per 100 pcs.....	@ 130.00
Horns, avg. 7 1/2 oz. and over, No. 1s.....	300.00@325.00
Horns, avg. 7 1/2 oz. and over, No. 2s.....	250.00@275.00
Horns, avg. 7 1/2 oz. and over, No. 3s.....	200.00@225.00

FANCY MEATS.

Fresh steer tongues, untrimmed.....	@ 32c	a pound
Fresh steer tongues, L. C. trim'd.....	@ 38c	a pound
Calves, heads, scalded.....	@ 85c	a piece
Sweetbreads, veal.....	@ 75c	a pair
Sweetbreads, beef.....	@ 55c	a pound
Beef kidneys.....	@ 16c	a pound
Mutton kidneys.....	@ 6c	each
Livers, beef.....	@ 22c	a pound
Oxtails.....	@ 15c	each
Hearts, beef.....	@ 8c	a pound
Beef hanging tenders.....	@ 15c	a pound
Lamb fries.....	@ 10c	a pair

BUTCHER'S FAT.

Shopfat.....	@ 3 1/2
Breast fat.....	@ 4 1/2
Edible suet.....	@ 6 1/2
Cond. suet.....	5 1/2
Bones.....	@ 25

SPICES.

	Whole.	Ground.
Pepper, Sing., white.....	15	18
Pepper, Sing., black.....	11 1/2	14 1/2
Pepper, red.....	31	35
Allspice.....	5 1/2	8 1/2
Cinnamon.....	13 1/2	17 1/2
Coriander.....	13	16
Cloves.....	30	35
Ginger.....	17	20
Mace.....	52	57

CURING MATERIALS.

	In lots of less than 25 bbls.	Bbls.	Double bags.
Double refined saltpetre, gran.....	6 1/2	6 1/2	
Double refined saltpetre, small crystals.....	7 1/2	7 1/2	
Double refined nitrate soda, granulated.....	4 1/2	4 1/2	
Double refined nitrate soda, crystals.....	5 1/2	5 1/2	
In 25-bbl. lots:			
Double refined saltpetre, granulated.....	6 1/2	6	
Double refined saltpetre, small crystals.....	7 1/2	7	
Double refined nitrate soda, granulated.....	4 1/2	4 1/2	
Double refined nitrate soda, crystals.....	5 1/2	5	
In carload lots:			
Double refined nitrate soda, granulated.....	4 1/2	4 1/2	
Double refined nitrate soda, crystals.....	5	4 1/2	

GREEN CALFSKINS.

	5-9	9 1/2-12 1/2	12 1/2-14	14-18	18 lbs.
Prime No. 1 veals.....	1.9	2.15	2.25	2.50	3.25
Prime No. 2 veals.....	1.7	1.85	2.00	2.25	3.00
Buttermilk No. 1.....	1.6	1.85	1.90	2.15	....
Buttermilk No. 2.....	1.4	1.65	1.65	1.90	....
Branded grubby.....	1.1	1.15	1.25	1.40	1.85
No. 3.....	At value				

DRESSED POULTRY.

FRESH KILLED.

Fowls—Fresh—dry packed, milk fed—12 to box.	
Western, 66 lbs. and over to dozen, lb.....	@ 31
Western, 48 to 54 lbs. to dozen, lb.....	@ 31
Western, 43 to 47 lbs. to dozen, lb.....	@ 31
Western, 36 to 42 lbs. to dozen, lb.....	@ 29
Western, 30 to 35 lbs. to dozen, lb.....	@ 27

Fowls—Fresh—dry packed, corn fed—12 to box.

Western, 66 lbs. and over to dozen, lb.....	@ 30
Western, 48 to 54 lbs. to dozen, lb.....	@ 31
Western, 43 to 47 lbs. to dozen, lb.....	@ 30
Western, 36 to 42 lbs. to dozen, lb.....	@ 28
Western, 30 to 35 lbs. to dozen, lb.....	@ 24

Fowls—Fresh—dry packed, corn fed—barrels.

Western, dry packed, 5 lbs. and over, lb.....	@ 23
Western, dry packed, 4 1/2 lbs. each, lb.....	@ 23
Western, dry packed, 3 1/2 lbs. each, lb.....	@ 23
Western, dry packed, 3 lbs. and under, lb.....	@ 25

Old Cocks—Fresh—dry packed—boxes or bbls.

Western, dry packed, small, boxes.....	@ 19
Western, scalded, bbls.....	@ 18

Ducks—

Western, per lb., boxes.....	@ 24
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Squabs—

White, 11 to 12 lbs. to doz., per doz.....	10.00@11.00
White, 10 lbs. to doz., per doz.....	8.50@ 9.50
Culls, per doz.....	1.50@ 3.00

LIVE POULTRY.

Chickens, via express.....	@ 27
Old roosters, via freight.....	@ 15
Ducks, via express.....	@ 28
Turkeys, hens, via express.....	@ 40
Geese, via express.....	@ 13
Pigeons, per pair, via freight or express.....	@ 70
Guineas, per pair, via freight or express.....	@ 70

BUTTER.

Creamery, extras (92 score).....	@ 51
Creamery, seconds.....	48 1/2 @ 49 1/2
Creamery, firsts.....	49 1/2 @ 50 1/2
Creamery, lower grades.....	47 1/2 @ 48

EGGS.

Fresh gathered, extras, per doz.....	@ 31
Fresh gathered, extra firsts.....	@ 28 1/2
Fresh gathered, firsts.....	@ 25
Fresh gathered checks, fair to choice, dry 21.....	@ 22 1/2
Fresh gathered dirties, No. 1.....	23 1/2 @ 24

FERTILIZER MARKETS.

BASIS NEW YORK DELIVERY.

Ammoniates.	
Ammonium sulphate, bulk, f. o. b. works, per 100 lbs.....	\$3.30 @ 3.40
Ammonium sulphate, double bags, per 100 lbs., f. o. b. New York.....	3.75 @ 3.90
Blood, dried, 15-16% bullt, per unit.....	@ 4.50
Fish scrap, dried, 11% ammonia, 15% B. P. L., delivered Baltimore.....	Nominal
Fish guano, foreign, 18@14% ammonia, 10% B. P. L.....	5.10 and 10c
Fish scrap, acidulated, 6% ammonia, 3% A. P. A., f. o. b. fish factory.....	3.85 and 80c
Soda nitrate, in bags, 100 lbs., spot.....	@ 2.65
Soda nitrate, in bags, futures.....	@ 2.65
Tankage, ground, 10% ammonia, 15% B. P. L., bulk.....	4.25 and 10c
Tankage, unground, 9-10% ammonia.....	4.00 and 10c
Phosphates.	
Bone meal, steamed, 5 and 50 bags per ton.....	@ 36.00
Bone meal, raw, 4 1/2 and 50 bags per ton.....	@ 40.00
Acid phosphate, bulk, f. o. b. Balt., per ton, 16%.....	@ 10.00
Potash.	
Kalmit, 12.4% bulk, per ton.....	@ 7.25
Manure salt, 20% bulk, per ton.....	@ 10.00
Muriate, in bags, basis 80%, per ton.....	@ 33.50
Sulphate, basis 90%, bags, ton.....	@ 45.00

BUTTER AT FOUR MARKETS.

Wholesale prices of 92 score butter at Chicago, New York, Boston and Philadelphia, for the week of March 24 to March 30, 1923:

	March			
	24.	26.	27.	28.
Chicago.....	51 1/2	51 1/2	50	49 1/2
New York.....	50 1/2	50 1/2	49 1/2	49
Boston.....	52	52	52	51 1/2
Phila.....	50 1/2	50 1/2	50 1/2	48 1/2

Wholesale prices of carlots, fresh centralized butter, 90 score at Chicago:

	March			
	24.	26.	27.	28.
Chicago.....	50	50	49 1/2	49 1/2

Receipts of butter by cities, tubs:

	This week.	Last week.	Last Mar. 30, week.	Since Jan. 1, 1922.
Chicago.....	31,808	28,521	27,150	603,184
New York.....	35,557	39,740	39,616	726,163
Boston.....	13,145	10,469	10,370	198,961
Phila.....	10,028	17,505	9,292	203,036

Total.....90,538 96,237 86,428 1,731,344 1,581,388

Cold storage movement, lbs.:

	Into storage.	Out of storage.	On hand Cor. day of Mar. 30, week.	1922.
Chicago.....	37,444	203,385	658,231	2,808,000
New York.....	20,880	354,418	1,770,767	2,294,000
Boston.....	31,061	283,512	1,346,000	2,346,000
Phila.....	780	10,113	615,448	250,000
Total.....	59,104	598,980	3,327,958	6,048,000

1923.

ex.

@30
@31
@30
@28
@28

@29
@29
@28
@25

@19
@18

@24

@11.00
@ 9.00
@ 1.00

@30
@15
@30
@45
@15
@70
@70

@51
@49 1/2
@50 1/4
@48

@31
@28 1/2
@20 1/2
@22 1/2
@24

33.48

33.00
34.50

nal

and 10c

and 50c

22.65

22.65

and 10c

and 10c

36.00

40.00

10.00

7.22

10.00

33.50

45.00

er at
ladel-
larch

-3
-1 1/2
- 1/2
- 1/2
cen-

- 1/2

. 1.

1922.

21,700

78,300

85,040

98,191

81,000

day of

1922.

108,000

24,000

44,000

50,100

48,000